U.S. Army Corps of Engineers
Sacramento District

FINAL PROGRAMMATIC ENVIRONMENTAL ASSESSMENT

AND

FINDING OF NO SIGNIFICANT IMPACT

CATEGORICAL PERMISSION FOR SECTION 408 REQUESTS

SACRAMENTO DISTRICT

January 2019

Prepared by:

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DEPARTMENT OF THE ARMY
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Levees and Channels Branch

FINDING OF NO SIGNIFICANT IMPACT
Programmatic Environmental Assessment
Categorical Permission for Section 408 Requests
U.S. Army Corps of Engineers, Sacramento District

I have reviewed and evaluated the information presented in the Programmatic Environmental Assessment (PEA) prepared for the Categorical Permission for Section 408 Requests in the Sacramento District. In compliance with 33 U.S.C. 408 ("Section 408") and Engineering Circular 1165-2-220, the Sacramento District proposes to implement a categorical permission in order to streamline its review and decision process for requests for minor alterations to USACE federally authorized civil works projects within the civil works boundary of the Sacramento District. The geographic scope of the decision to be made is limited to USACE federal projects under the responsibility of the Sacramento District. The decision does not apply to any other USACE districts. The decision only applies to federally authorized levees and channel modification projects and does not apply to any lake projects. The temporal scope of the decision is five years; after five years the decision will be reevaluated.

The Sacramento District prepared a public notice describing the proposed alternatives, the activities covered by the proposed categorical permission, and the potential environmental effects. This public notice was posted on the Sacramento District website from September 18, 2017, through October 18, 2017, and members of the public as well as Indian tribes and federal and non-federal agencies were notified of its location by email and invited to comment. The Sacramento District received thirteen total responses to this public notice; the Sacramento District addressed these responses in the PEA. The Sacramento District distributed the draft Categorical Permission decision document along with the alteration descriptions (Enclosure 2 of the Categorical Permission) to the public following the public notice procedure described above. The Sacramento District posted these draft documents on the Sacramento District website from October 9, 2018, through November 8, 2018. The Sacramento District received ten total responses to this public notice; the Sacramento District addressed these responses in the PEA.

As the implementation of a categorical permission to streamline the Section 408 review and decision process would not involve any on-the-ground work, there are no anticipated direct effects to the human environment resulting from the decision at hand. The decision on the categorical permission does not authorize any specific Section 408 requests or any ground disturbing work. Based on my review of the PEA (incorporated herein by reference) and information provided by interested parties, I have determined that implementation of the categorical permission will not have a significant effect on the human environment. For this reason, no environmental impact statement needs to be prepared. Therefore, the PEA and Finding of No Significant Impact provide adequate environmental documentation to implement the proposed action.

David G. Ray, P.E.
Colonel, U.S. Army
Commander and District Engineer

14 JAN '19
Date Approved

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TABLE OF CONTENTS

APPENDICES

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS AND ABBREVIATIONS

ARPA	Archaeological Resources Protection Act
ASTM	American Society for Testing and Materials
BMPs	Best management practices
BOR	U.S. Bureau of Reclamation
Caltrans	California Department of Transportation
CDA	Colorado Department of Agriculture
CDFA	California Department of Food and Agriculture
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CLSM	Controlled low-strength material
CVFPB	Central Valley Flood Protection Board
Delta	Sacramento – San Joaquin River Delta
DPS	Distinct population segment
DWR	California Department of Water Resources
E.O.	Executive Order
EA	Environmental assessment
EC	Engineering Circular
EFH	Essential fish habitat
EIS	Environmental impact statement
ER	Engineering Regulation
ESA	Endangered Species Act
ESU	Evolutionarily significant unit
FEMA	Federal Emergency Management Agency
FHWA	Federal Highways Administration
FPPA	Farmland Protection Policy Act
FR	Federal Register
FWCA	Fish and Wildlife Coordination Act
HAPC	Habitat area of particular concern
HDD	Horizontal directional drilling

HQUSACE	U.S. Army Corps of Engineers Headquarters
HUC	Hydrologic unit code
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves and Repatriation Act
NDA	Nevada Department of Agriculture
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
O&M	Operations and Maintenance
PEA	Programmatic environmental assessment
PM	Particulate matter
SAR	Safety Assurance Review
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SWAMP	Surface Water Ambient Monitoring Program
THPO	Tribal Historic Preservation Officer
TIP	Tribal Implementation Plan
TMDL	Total maximum daily load
U.S.C.	United States Code
UDAF	Utah Department of Agriculture and Food
UDEQ	Utah Department of Environmental Quality
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USDOE	U.S. Department of Energy
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

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1. PURPOSE OF AND NEED FOR ACTION

1.1 INTRODUCTION

There are numerous United States Army Corps of Engineers (USACE) civil works projects within the boundaries of the South Pacific Division, Sacramento District. These projects have been federally authorized by the U.S. Congress and then turned over to a non-federal sponsor to operate and maintain. Projects include flood risk management projects, such as levees and channels, located in both rural and urban areas. Sacramento District's civil works boundaries include portions of the states of Arizona, California, Colorado, Idaho, Nevada, Oregon, Utah, and Wyoming (Figure 1). USACE federally authorized civil works projects ("USACE federal projects" or "USACE projects") within the Sacramento District boundaries are located in California, Colorado, Nevada, and Utah (Figures 2 and 3).

Each year the Sacramento District receives requests through the non-federal sponsors from private, public, tribal, or other federal entities ("requesters") to alter USACE federally authorized civil works projects. The majority of these requests are to alter USACE projects located within California. For example, in 2017 the Sacramento District received 107 total requests to alter USACE projects, 103 of these requests were to alter projects located within California.

When the Sacramento District receives a request to alter a USACE project, the district follows a review and approval process outlined in the 2014 Engineering Circular (EC) 1165-2-220, *Policy and Procedural Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408*. This process can be lengthy; to help streamline the review process, EC 1165-2-220 states that USACE districts can develop categorical permissions to cover potential alterations that are "similar in nature and that have similar impacts to the USACE project and the environment."

The Sacramento District proposes to implement a categorical permission in order to streamline its review process for requests for minor alterations to USACE projects within the civil works boundary of the Sacramento District.

In order to address the potential environmental impacts of implementing a categorical permission, as required under the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321 *et seq.*), the Sacramento District has prepared this Programmatic Environmental Assessment (PEA) following the Council on Environmental Quality (CEQ), NEPA Regulations (40 CFR 1500-1508), USACE Engineer Regulation (ER) 200-2-2 (33 CFR 230), and CEQ guidance on the *Effective Use of Programmatic NEPA Reviews* (CEQ 2014).

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Figure 1. Map showing the USACE Sacramento District civil works boundary.

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1.2 33 U.S.C. SECTION 408 AUTHORITY AND GUIDANCE

The authority to grant permission for temporary or permanent use, occupation or alteration of any USACE federally authorized civil works project is contained in Section 14 of the Rivers and Harbors Appropriation Act of 1899, as amended, codified at 33 U.S.C. 408 ("Section 408"). Section 408 authorizes the Secretary of the Army, on the recommendation of the Chief of Engineers, to grant permission for the alteration or occupation or use of a USACE project if the Secretary determines that the activity will not be injurious to the public interest and will not impair the usefulness of the project. An alteration is considered to be "any action by any entity other than USACE that builds upon, alters, improves, moves, obstructs, or occupies an existing USACE project." (EC 1165-2-220). Section 408 authority only applies to alterations proposed within the lands and real property interests identified and acquired for the USACE project and to lands available for USACE projects under the navigation servitude. According to EC 1165-2-220, "[m]aintenance and repair activities conducted by non-federal sponsors on the USACE project for which they have operation and maintenance responsibilities do not require Section 408 permission, but may require coordination or concurrence from the USACE district." The Secretary of Army's authority under Section 408 has been delegated to the USACE Chief of Engineers. The USACE Chief of Engineers has further delegated the authority to the USACE Directorate of Civil Works, Division and District Engineers, and Supervisory Division Chiefs depending upon the nature of the activity.

In EC 1165-2-220, USACE has issued policy and guidance for processing Section 408 requests. EC 1165-2-220 clarifies that a decision on a Section 408 request is a federal action, and therefore subject to NEPA and other environmental compliance requirements. Additionally, EC 1165-2-220 outlines the options for requesting Section 408 permission and the process by which Section 408 requests will be reviewed. A USACE review team will review the Section 408 request and determine if the proposed alteration would impair the usefulness of the project, be injurious to the public interest, and if the proposal meets all legal and policy requirements. The review team will determine if the proposed alteration would limit the ability of the USACE project to function as authorized, or would compromise or change any authorized project conditions, purposes or outputs. In order for an alteration to be approved, the requester must demonstrate that the alteration does not impair the usefulness of the federally authorized project. The decision whether to approve an alteration will be determined by the consideration of whether benefits are commensurate with risks. Following the technical review, the district will develop a Summary of Findings (content and format scalable to the alteration) to summarize the district rationale and conclusions for recommending approval or denial.

When processing Section 408 requests where the decision will be made at the District level, the Sacramento District currently implements single-phased reviews in the following way.

- Section 408 requests are submitted by the non-federal sponsor to the Sacramento District 408 Permission Section.

- 408 Permission Section conducts an initial review of the request package and determines what technical reviews are needed.
- Environmental technical reviews for all relevant federal laws are conducted or coordinated by natural resource specialists within the 408 Permission Section.
- All requests that require a levee safety review are sent to the Sacramento District Levee Safety Section for a technical review.
- All requests that require a hydraulics review are sent to the Sacramento District Hydraulics Section for a technical review.
- Once all technical reviews are complete, the 408 Permission Section prepares a summary of findings, and compiles the engineering technical reviews and environmental compliance documentation into a routing package.
- The routing package is reviewed and signed by the 408 Permission Section Chief, the Levees and Channels Branch Chief, the Operations Division Chief, the Engineering Division Chief and Levee Safety Officer, District Counsel, the Executive Secretary, the Executive Assistant, the Deputy District Engineer for Project Management, and the Deputy District Commander, with the final decision made by the District Commander. Current guidance allows for the District Commander to delegate decision authority for Section 408 alterations to a Supervisory Division Chief. As of November 24, 2017, this guidance has been implemented in the Sacramento District, with the District Commander delegating decision authority for Section 408 alterations to the current Chief of Engineering Division.
- Following signature by the Chief of Engineering Division, the final notification is transmitted to the non-federal sponsor.

1.3 PURPOSE OF AND NEED FOR DECISION

The Sacramento District receives numerous Section 408 requests each year, including a total of 104 requests in 2015, 122 requests in 2016, and 107 requests in 2017. Some of these requests are determined to be located on non-federally authorized levees and channels; however, many are located on USACE projects. The majority of these requests are for relatively minor alterations of the levee or channel, such as installation of irrigation pipes, horizontal directional drilling for the placement of utility lines, and private recreational boat docks. Many of the project descriptions for proposed alterations are similar and the effects tend to be minor or negligible. However, the current review and decision making process is time intensive and the review process for many Section 408 requests has taken over one year from receipt to permission decision. The purpose and need for the proposed action is to streamline the review process of Section 408 requests for minor alterations that are similar in nature and have similar impacts to USACE projects.

1.4 SCOPE OF THE DECISION TO BE MADE

The alternatives being considered are to continue with the current process of reviewing Section 408 requests, as described in Section 1.2 of this PEA, or to approve a categorical permission to streamline the review process of Section 408 requests that fit under one or more of the 25 proposed alteration types described in Section 2.3 of this

PEA. The Sacramento District's area of responsibility covers a wide geographic area and includes the states of Arizona, California, Colorado, Idaho, Nevada, Oregon, Utah, and Wyoming (Figure 1). The geographic scope of the decision to be made is limited to USACE federal projects under the responsibility of the Sacramento District. USACE federal projects within the Sacramento District are located in California, Nevada (Figure 2), Utah, and Colorado (Figure 3). The decision does not apply to any other USACE districts. The decision only applies to federally authorized levees and channel modification projects and does not apply to any lake projects. The temporal scope is five years; after five years the decision would be reevaluated and may be renewed if appropriate.

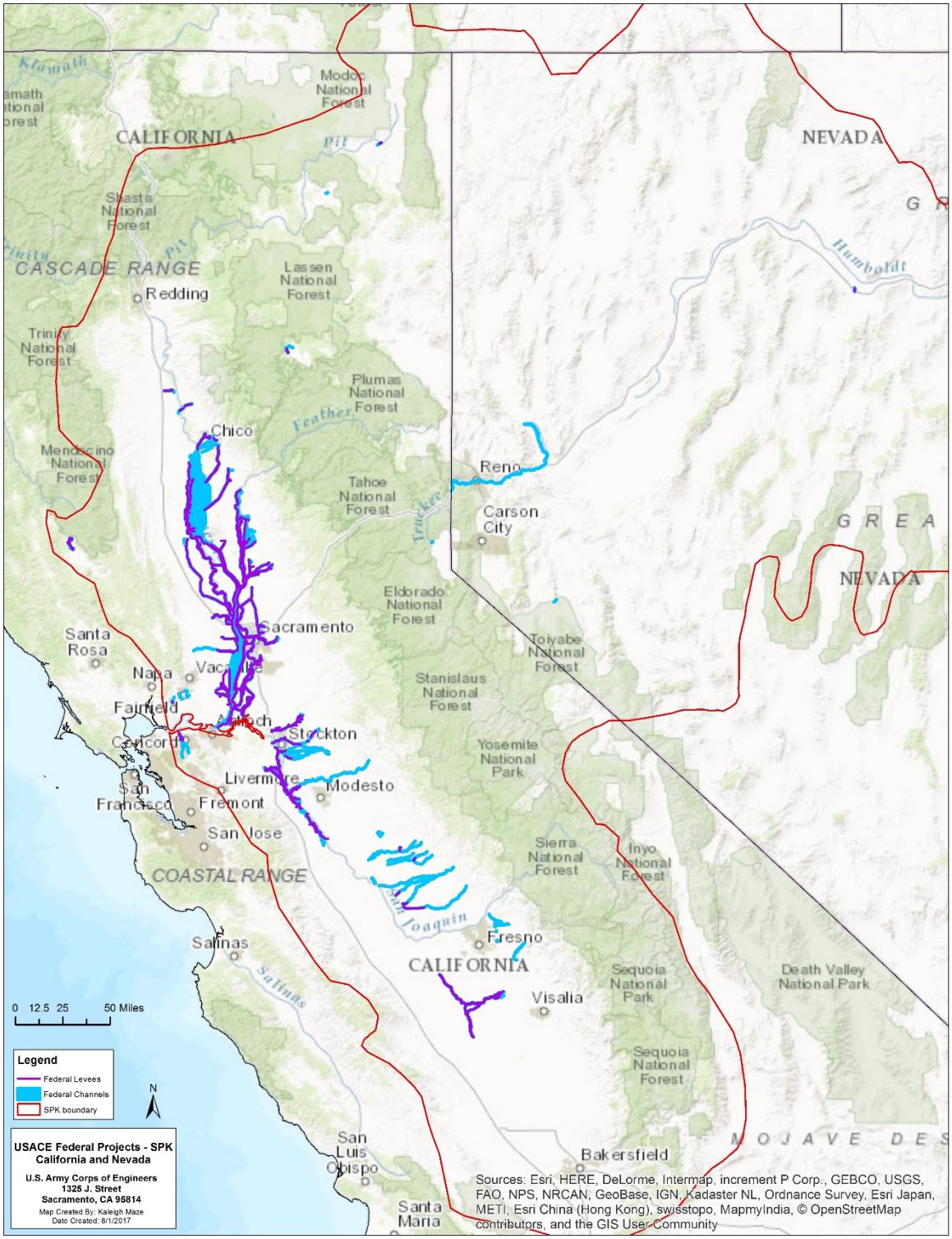

Figure 2. Map showing the USACE federal project levees and channels located within the Sacramento District in California and Nevada.

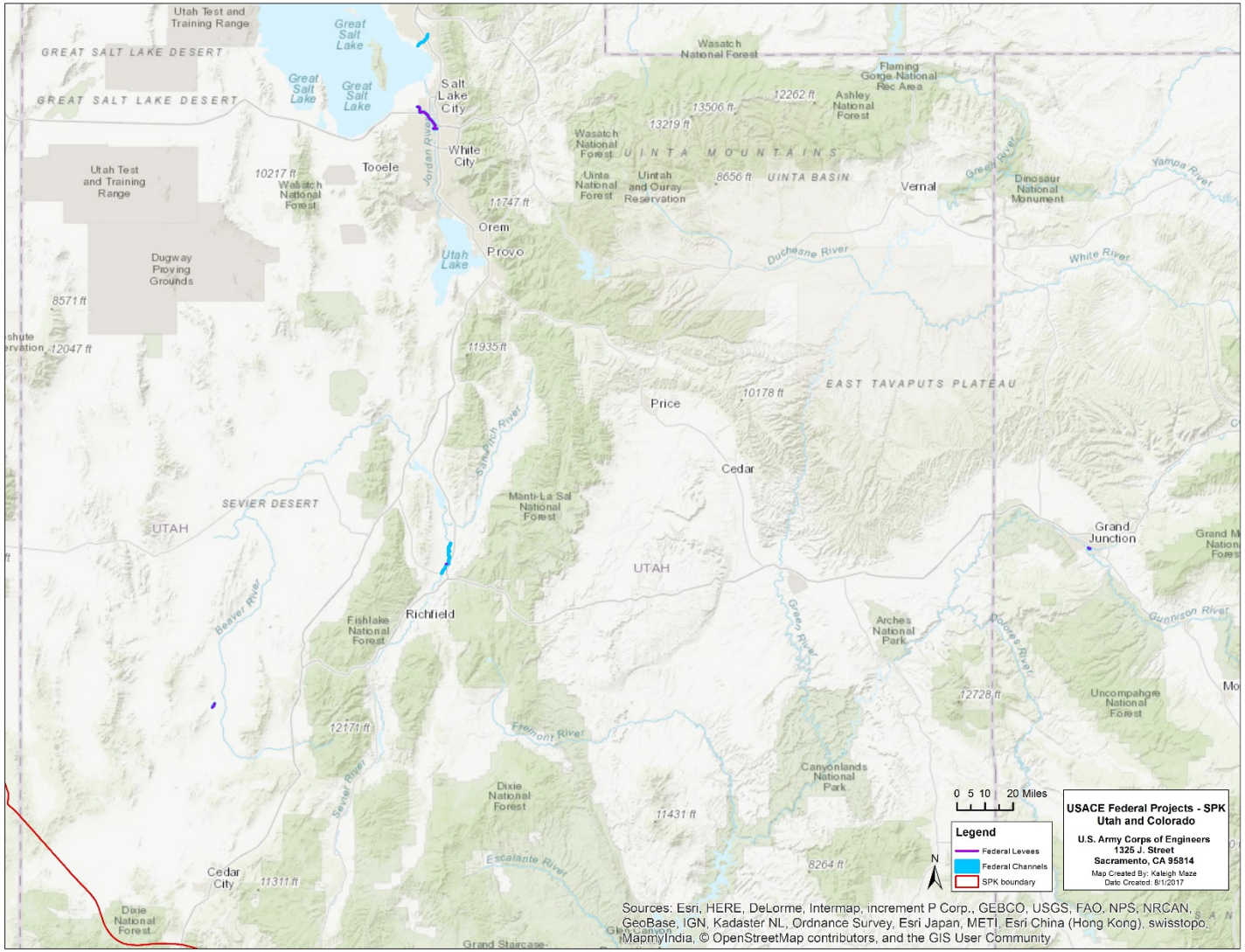

Figure 3. Map showing the USACE federal project levees and channels located within the Sacramento District in Utah and Colorado.

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1.5 SCOPING AND ISSUES

Per NEPA requirements and USACE guidance in EC 1165-2-220, the Sacramento District prepared two separate public notices (Appendix A). The first public notice described the alternatives, the activities covered by the proposed Categorical Permission, and the potential environmental effects. The second public notice provided the draft Categorical Permission and alteration descriptions for public review and comment. The Sacramento District posted these public notices on the Sacramento District website from September 18 through October 18, 2017, and October 9, 2018, through November 8, 2018. Members of the public who had previously self-identified as having interest in USACE permitting actions in California, Colorado, Nevada, or Utah, were notified by email of each public notice location on the website and invited to comment. Additionally, a large number of state and federal agencies, tribes, city and county governments, reclamation districts, local maintaining agencies (LMAs), flood control districts, special interest groups, nonprofit organizations, and other potentially interested entities were notified of the public notices.

Specifically, the Sacramento District notified the following federal agencies: NOAA Fisheries, U.S. Bureau of Reclamation (BOR), U.S. Coast Guard, U.S. Environmental Protection Agency (USEPA), U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service, and Natural Resources Conservation Service. The Sacramento District notified the following California state agencies: Air Resources Board, Central Valley Flood Protection Board, Department of Fish and Wildlife, Department of Parks and Recreation, Department of Transportation, Department of Water Resources, Farm Bureau Federation, State Historic Preservation Office, State Lands Commission, and State Water Resources Control Board. The Sacramento District notified the following Colorado state agencies: Department of Public Health and Environment (including the Air Quality Control Commission), Department of Transportation, Division of Parks and Wildlife, Division of Water Resources, State Historic Preservation Office, and Water Conservation Board. The Sacramento District notified the following Nevada state agencies: Bureau of Air Quality Planning, Bureau of Water Quality Planning, Department of Conservation and Natural Resources, Department of Transportation, Division of Water Resources, and State Historic Preservation Office. The Sacramento District notified the following Utah state agencies: Board of Water Resources, Department of Transportation, Division of Air Quality, Division of Forestry Fire & State Lands, Division of Water Quality, Division of Wildlife Resources, Geological Survey, Governor's Office of Economic Development, Public Lands Policy Coordination Office, and State Historic Preservation Office.

The Sacramento District received thirteen total responses to the 2017 public notice. The BOR, California Central Valley Flood Control Association, California Department of Water Resources (DWR) Division of Flood Maintenance, California High Speed Rail Authority, California State Historic Preservation Office, Carson-Truckee Water Conservancy District, Central Valley Flood Protection Board (CVFPB), Pacific Gas and Electric Company, Reclamation District 17, Sacramento Water Forum, USEPA, and two private individuals responded to the 2017 public notice. A summary of these comments and the USACE response to each substantive comment is in Appendix A.

The Sacramento District received ten total responses to the 2018 public notice. The California Central Valley Flood Control Association, Colorado State Historic Preservation Officer, CVFPB, River Partners (along with American Rivers, CalTrout, and Friends of the River), Sacramento Metropolitan Air Quality Management District, Sacramento Water Forum, Salt Lake County Flood Control, USFWS Anadromous Fish Restoration Program, Utah Public Lands policy Coordinating Office, and Yocha Dehe Wintun Nation responded to the 2018 public notice. A summary of these comments and the USACE response to each substantive comment, as well as a complete public scoping record, is in Appendix A.

During scoping, the interdisciplinary planning team identified issues associated with the following fourteen resources: air quality, noise, water quality, wetlands and other waters, fish and wildlife, floodplains, invasive species, threatened and endangered species, vegetation, aesthetics, cultural resources, farmland/agriculture, recreation, and transportation and traffic. Additionally, the interdisciplinary team identified environmental justice as an issue.

As streamlining the Section 408 review process would not involve any on-the-ground work, there are no anticipated direct effects to environmental resources resulting from the decision at hand. However, the types of alterations that the Sacramento District would review under the proposed Categorical Permission have the potential to impact the relevant resources listed above. Therefore, in Chapter 3, this PEA discusses the major broad and general issues relating to these relevant resources. The issues of environmental justice and floodplains are not discussed in Chapter 3, but are instead discussed in Chapter 4, Section 2.

The interdisciplinary planning team identified the following resources that are not expected to be affected by the proposed action and thus are not discussed further: climate, economic factors, geology, hazardous materials, land use, minerals and energy resources, population dynamics, socioeconomics, soils, and wilderness areas.

2. ALTERNATIVES

2.1 SUMMARY

This chapter both describes the alternatives and compares them in terms of their environmental impacts. Per CEQ NEPA guidance, only reasonable alternatives should be discussed in detail (40 CFR §1502.14). Additionally, EC 1165-2-220 clarifies that for Section 408, reasonable alternatives should focus on two scenarios: 1) no action and 2) action.

2.2 NO ACTION ALTERNATIVE

Under the no action alternative the Sacramento District would continue to review all Section 408 requests using the same process that is currently used. Currently, the Sacramento District reviews all minor 408 requests following the single-phase or multi-phase procedures outlined in EC 1165-2-220. Division review and HQUSACE review are not required for alterations that can be approved at the USACE District level.

Proposed alterations that require Division and HQUSACE review are not further discussed in this PEA. Currently, Section 408 requests that can be approved at the District level undergo an environmental compliance review as well as engineering reviews, including hydraulics and/or levee safety. Upon the completion of these technical reviews, a summary of findings is assembled and undergoes reviews by multiple divisions within the Sacramento District as well as a legal review by Office of Counsel, before final signature by the Engineering Division Chief and Levee Safety Officer.

2.3 PREFERRED ALTERNATIVE

Under the Preferred Alternative, in accordance with EC 1165-2-220, a Categorical Permission would be utilized to streamline the review process of Section 408 requests. This Categorical Permission would encompass a list of potential alterations that are similar in nature and have similar impacts. The specific alterations are outlined starting at Section 2.3.2, and are described in greater detail (including engineering standards) in Enclosure 2 of the Categorical Permission document. See Figures 4 and 5 for illustrations of common terms used throughout the alteration descriptions. For a proposed alteration to be evaluated under the Categorical Permission, it must fit one or more of the alteration types included in the Categorical Permission, it must be designed in accordance with the standards described in Enclosure 2 of the Categorical Permission document, it must not have any disqualifying circumstances (see Section 2.3.1), and it must implement the engineering and environmental conditions described in Section 2.3.1 of this PEA.

The alterations described under the proposed Categorical Permission could be stacked. A single proposed project could combine multiple categories of alterations (for example, a utility pole, a fence, and a maintenance shed) and still fit under the proposed Categorical Permission. Each individual alteration type contained within the overall project must adhere to the size limitations for that specific type of alteration. The total area associated with the overall project must not exceed the largest alteration size limit.

The proposed Categorical Permission decision process would be implemented as follows:

- Under the Categorical Permission, the Sacramento District 408 Permission Section would receive Section 408 requests for alterations to USACE federal projects from requesters through the non-federal sponsors of the federal projects, following current procedures.
- The 408 Permission Section would then verify that the proposed alteration fits under the Categorical Permission.
- If a proposed alteration does not fit under the Categorical Permission, then the Section 408 request would be reviewed following the current process, as described in EC 1165-2-220 and Section 1.2 of this PEA.
- If a proposed alteration fits under the Categorical Permission, the engineering technical reviews may be completed either by the 408 Permission Section, and/or by the Levee Safety Section and the Hydraulic Analysis Section.

- The Section that would be responsible for conducting the technical review would depend upon the type of alteration and technical details specific to the proposed alteration. See Enclosure 4 of the Categorical Permission document for details.
- Efficiencies would be gained in this process by shifting the technical review(s) of select types of alterations to the 408 Permission Section and limiting the number of individuals needed to validate applicability of the Categorical Permission.
- The 408 Permission Section would complete additional environment reviews and coordination as necessary. This may include, but would not be limited to, consultation pursuant to Section 7 of the Endangered Species Act and consultation pursuant to Section 106 of the National Historic Preservation Act.
- A Categorical Permission validation memorandum would be completed for all proposed alterations covered under the Categorical Permission.
- Following completion of the technical review(s) and the validation memo, the 408 Permission Section would prepare a routing package. This routing package would be reviewed by the 408 Permission Section Chief, the Levees and Channels Branch Chief, and the Operations Division Chief. Depending on the level of engineering technical review needed, final validation would be made by either the Operations Division Chief or the Engineering Division Chief/Levee Safety Officer. See Enclosure 4 of the Categorical Permission for more details regarding implementation.

2.3.1 Conditions and Disqualifying Circumstances

In order for the Categorical Permission to apply, a Section 408 request must incorporate the following engineering and environmental conditions into the alteration plan. Proposed alterations that do not meet these conditions would be evaluated under one of the other options outlined in EC 1165-2-220. In addition to these conditions, USACE may impose project specific conditions. Additionally, certain circumstances would disqualify proposed alterations from use of the Categorical Permission.

Disqualifying Circumstances:

1. The alteration could not be decided at the District level.
2. The alteration is controversial.
3. The alteration would result in a loss of sensitive habitat or a net loss of riparian habitat.
4. The alteration would exceed federal *de minimis* air quality standards.
5. The alteration would construct a new structure for human inhabitation.
6. The alteration would adversely impact a public use facility.
7. The alteration would induce development in the floodplain.

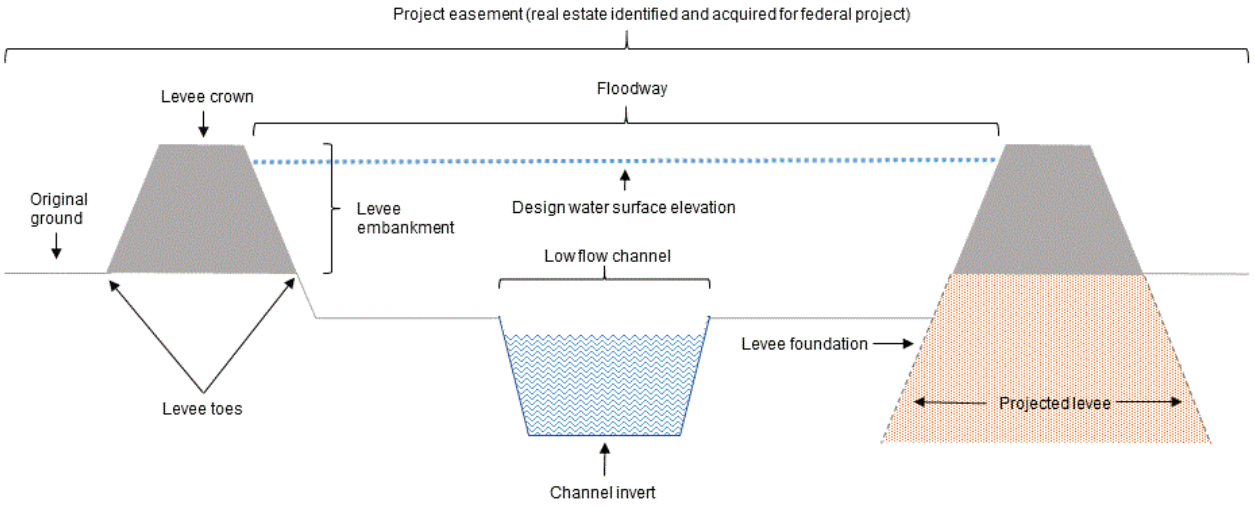

Figure 4. Illustration of common terms for federal projects.

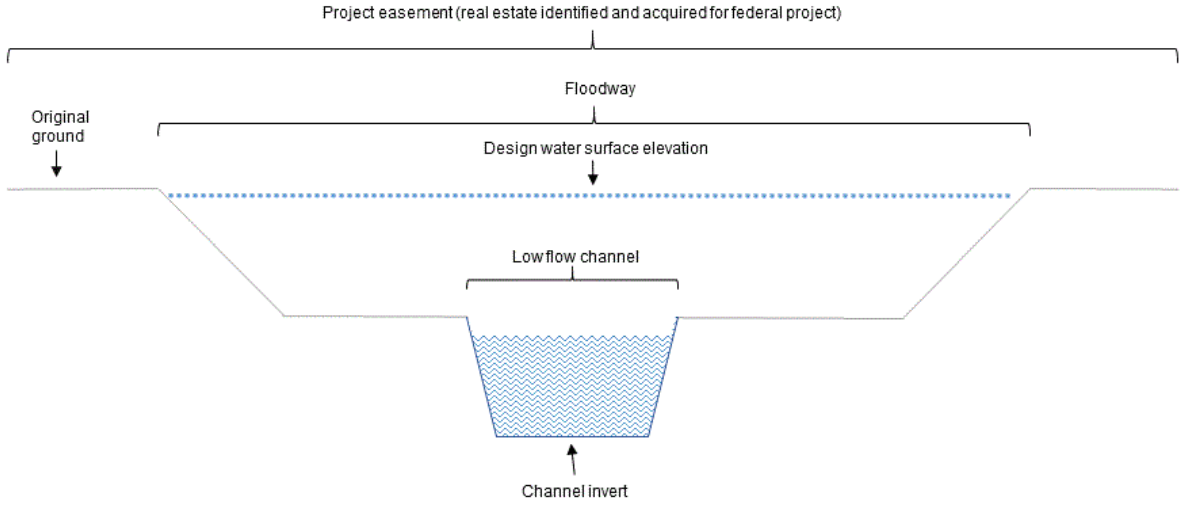

Figure 5. Illustration of common terms for federal project channels.

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Engineering conditions:

ENG-1. The alteration must not interfere with the integrity or hydraulic capacity of the flood risk management project; easement access; or maintenance, inspection, and flood fighting procedures.

ENG-2. If an alteration would affect the hydraulic capacity of the floodway whatsoever, the requester must prepare a blockage calculation or hydraulic analysis for review in accordance with current USACE guidance.

ENG-3. Construction or other work in the floodway cannot take place during the flood season unless approved in writing by the non-federal project sponsor.

ENG-4. No temporary staging, stockpiles of materials, temporary buildings, or equipment can remain on the levee or in the floodway during flood season unless approved in writing by the non-federal project sponsor.

ENG-5. Construction or other work must be coordinated with other work in the area.

ENG-6. Excavations and drilling must meet federal, state, and local criteria, USACE standards, and Office of Safety and Occupational Health standards.

ENG-7. The requester is responsible for removal and disposal of trees or brush cleared during construction. The removal and disposal must be to areas outside the limits of the federal project easement.

ENG-8. The requester is responsible for protecting the levee from being damaged by construction vehicles, equipment, construction activities, and storage of materials.

ENG-9. All material used for fill on levee slopes and the crown must be acceptable cohesive material (Unified Soil Classification System CL, CL-ML, or SC) and free of organics or other materials harmful to the levee.

ENG-10. The proposed alteration must be backfilled under and around with controlled low-strength material (CLSM). Backfill above the alteration should consist of CLSM or suitable material compacted in 4- to 6-inch lifts, unless otherwise specified by USACE.

ENG-11. All structures, facilities, related equipment and other appurtenances must be properly anchored to prevent flotation within the floodway in the event of high water.

ENG-12. All companies/agencies whose existing utilities are installed in the intended construction area(s) must be contacted to determine whether those utilities need to be relocated or modified to accommodate the proposed alteration, or whether they would pose any hazards to construction workers or equipment.

ENG-13. Appropriate property rights must be acquired as needed for construction, operation, and maintenance of the alteration.

ENG-14. Areas disturbed during construction or other work associated with an alteration must be restored to pre-construction conditions once the work is complete.

ENG-15. The Section 408 request must include construction drawings that show details of all proposed activities within the project easement area, including any excavation details, a cross section of the levee and/or channel affected by the proposed alteration and associated appurtenances, a plan view of the existing levee easement with the proposed alteration shown.

ENG-16. Any damage caused by removal or modification of any alteration would need to be repaired as part of the removal or modification activity.

ENG-17. The preferred method for abandoning alterations is complete removal.

Environmental conditions:

ENV-1. Access to the proposed alteration site must occur in previously disturbed areas, such as existing roads, access ramps, driveways, or the levee crown.
ENV-2. Upland areas may be temporarily cleared for staging of equipment and materials during construction.
ENV-3. Vegetation may be removed during construction; however, alterations should be designed to minimize the amount of woody vegetation removal.
ENV-4. Excess material from construction must be removed from the floodway and disposed in an area outside the limits of the federal project easement.
ENV-5. Proposed alterations must be designed to minimize the introduction of exotic species (both plant and animal) and any seed mixes used in site restoration must consist only of native species.
ENV-6. Proposed alterations must incorporate Best Management Practices (BMPs) to control storm water runoff, erosion, and contaminant spills (e.g., diesel fuel spills).
ENV-7. In the event of an environmental spill, the requester must notify the USACE, the non-federal sponsor, and the appropriate state agency immediately. Cleanup and repair is the requester's responsibility.
ENV-8. If artifacts or other culturally sensitive materials are found during excavation, work must stop immediately and the USACE must be notified
ENV-9. Landowner permission and any other applicable federal, state, or local permits need to be secured before work can begin.

2.3.2 Agriculture and Landscaping

A variety of standard agricultural activities may occur within the federal project easement. These activities may include, but are not limited to, orchard installation and cultivation, planting of row crops, animal grazing, installation of temporary or permanent irrigation lines in the floodway, and landscaping associated with existing buildings or structures. Grazing is not allowed during periods of prolonged rain. No structures, sheds, or troughs are allowed on the levee or within 15 feet of the levee toe. No livestock are permitted to be penned or corralled on the levee. Grazing practices must be discontinued if there is excessive damage to the levee. Native grasses (maximum 12-inch height) are acceptable on levees from a flood risk management perspective. Orchards, flower gardens, vegetable gardens, and irrigation systems, however, are not permitted within 15 feet of the levee toes. The total area of work per proposed alteration must not exceed 350 acres in size. The proposed Categorical Permission covers work in land previously used for agriculture (fallow fields, row crops, etc.) and does not cover conversion of native habitat to cultivated land. Standard farming equipment (tractors, mowers, plows, etc.), backhoes, large trucks, augers, and other heavy equipment may be used during installation and maintenance.

2.3.3 Borings, Levee Explorations, and Instrumentation

Multiple geotechnical and similar borings, exploratory activities, and instrumentation may be conducted within the levee embankment, adjacent to the levee toe, and/or in the floodway. Borings and levee explorations include, but are not limited to; conventional geotechnical borings, cone penetration testing, hydrovacing, potholing, and trenching. A maximum of 25 borings or explorations per proposed alteration may be covered by the Categorical Permission. Instrumentation such as piezometer or inclinometer installation, and associated equipment used to monitor or test the levee and/or floodway is included in this alteration. Boreholes that are awaiting backfill should be covered to prevent entry by small animals. Equipment may include large truck mounted drilling rigs and personnel work trucks, although additional heavy equipment may be used as well.

2.3.4 Borrow Areas

Borrow sites may be excavated in the floodway. The minimum distance of the borrow area to the waterside or landside levee toe is 300 feet. Borrow sites authorized under this Categorical Permission may not exceed five acres in size. Large equipment, such as scrapers, excavators, and dump trucks, may be used for excavation and transportation. Areas that contain soils exhibiting hazardous or toxic characteristics, even if naturally occurring, must not be used as borrow material. Areas where known historic or cultural artifacts are located must not be used for borrow. The proposed borrow area must be free of riparian habitat and woody vegetation and the borrow site must be revegetated with native species or returned to the previous use after material is removed. Borrow areas should be located far enough away from the channel to prevent migration of water into the borrow area.

2.3.5 Bridges

The proposed Categorical Permission would cover alterations that include new construction, replacement, or modification of vehicle, pedestrian, or railroad bridges, or actions that are similar in nature. Construction, modification or rehabilitation may occur on the approach to the bridge. The total area of ground disturbance must not exceed five acres. Adequate bank protection (e.g., riprap) must be placed on the banks upstream, downstream and under the bridge. The area in and around the construction site must be kept clear to prevent erosion and/or a reduction in channel capacity. If a bridge is planned for replacement, the existing structure must be completely removed and disposed of outside the project easement.

2.3.6 Buildings and Structures

The proposed Categorical Permission covers construction and modification of buildings or other structures, such as, solar arrays, artwork, patios, and decks, along with associated work, such as minor landscaping, in the federal project easement. New buildings within the levee embankment are not included in the proposed Categorical Permission. Structures must be constructed in previously disturbed areas, the proposed Categorical Permission does not cover conversion of native habitat. New buildings and similar structures authorized under the proposed Categorical Permission must not be used for human habitation. Modifications to existing inhabited buildings

may be allowed so long as the habitable area of the structure is not increased. The maximum area of construction must not exceed two acres. Construction activities may include the use of earthmoving equipment, concrete trucks, dump trucks, cranes, etc.

2.3.7 Ditches and Canals

The proposed Categorical Permission would cover the construction, modification and filling of ditches and canals within the project easement. All ditches must be located outside the projected levee embankment. Ditches and/or canals may be a maximum length of 1000 linear feet. A variety of heavy equipment, including excavators and bulldozers, may be used during construction.

2.3.8 Docks

The proposed Categorical Permission would cover landing structures, gangways, the floating dock structure, small amounts of riprap, and debris booms associated with boat docks. No part of the floating platform or pilings may penetrate into the levee or be within 15 feet of the waterside levee toe. Gangway supports may be located within the levee embankment. Pilings may be used to anchor the floating dock platform; if used, pilings must be a minimum of two feet taller than the adjacent levee crown. Pilings can go as deep as needed, provided they do not penetrate the projected levee embankment. Materials coated with creosote are prohibited and any chemically treated material must be coated with an impact-resistant, biologically inert substance. Decking material must be made of metal grating, plastic, or non-reactive (e.g., epoxy, wood) product, and flotation devices must be of materials that will not disintegrate, such as plastic or closed cell foam encapsulated sun-resistant polyethylene. The maximum dock size (including gangway, floating platform, and any associated covers), for both replacement of existing structures and new structures, is 2000 square feet.

2.3.9 Environmental Restoration

The proposed Categorical Permission would cover a variety of restoration activities, including, but not limited to, planting of native vegetation (grasses, forbs, shrubs, and/or trees), placement of spawning gravels in active stream channels, removal of invasive species, and restoration and enhancement of ponds, stream channels, and wetlands. Stream and wetland restoration activities may include removal of sediment, installation, removal, or modification of small, non-federal water control structures (e.g., dikes and berms), modification of stream bed and/or banks, and/or removal of stream barriers, among other activities. The total area of restoration must not exceed 500 acres in size and the total length of channel restoration must not exceed 5000 linear feet.

2.3.10 Erosion Control

The proposed Categorical Permission would cover a variety of erosion control activities. Rock slope protection (e.g., riprap) is the most common type of erosion control; however, other types of erosion control and bank stabilization methods and materials may be used. Asphalt and other petroleum-based products, floatable and refuse material must not be used for erosion control on a levee or within a floodway. Rocks

must not be grouted into place. The maximum area of construction is 500 linear feet of bank.

2.3.11 Fences, Gates, and Signage

The proposed Categorical Permission would cover the installation, modification, and replacement of fences, gates, signage, and similar activities located on the levee or in the floodway. Fences proposed in the levee easement must be constructed of durable, see-through materials (e.g., chain link, wrought iron, barbed wire) to ensure adequate levee visibility. All fences, including pertinent features, on the waterside of a levee must be completely removable.

2.3.12 Fiber Optic and Dry Utility Pipes

The proposed Categorical Permission would cover the installation, maintenance, and replacement of dry utility pipes, such as fiber optic cables. Heavy equipment, such as front end loaders and backhoes, may be used during construction. No plastic pipes (high-density polyethylene, PVC, etc.) are allowed in the levee embankment or its foundation unless they are embedded in concrete. Pipes that are not easily seen but may pose a threat to flood-fighting or maintenance (e.g., electrical pipes) must be clearly marked. The total area of disturbance must not exceed five acres.

2.3.13 Fish Screens

The proposed Categorical Permission covers fish screens, including drums, plates, cylindrical, cones, or other designs proposed for installation, modification, or replacement on water intake pipes. Associated facilities, such as maintenance structures, walkways, and supports, may be installed, modified, or replaced as well. A variety of heavy equipment may be used during construction. Screens must be designed in a way to prevent them from being hazardous to recreational activities (e.g., boating, swimming) in the vicinity of the screens. When possible, fish screens should be positioned in the floodway in a fashion that results in a sweeping, eddy-free flow capable of moving fish and debris along and past the facility under all flow conditions. Screens must be equipped with a manual or automatic apparatus to remove sediment and debris. With either type of apparatus, periodically, screens should be manually cleared of accumulated debris which must be disposed of outside the limits of the project easement. The maximum area of construction of fish screen support facilities must not exceed one acre.

2.3.14 Gravity Pipes

The proposed Categorical Permission would cover the installation, modification, and replacement of gravity pipes and culverts. Heavy equipment, such as front end loaders and backhoes, may be used during construction. Generally, cast-in-place reinforced concrete pipes are preferable for gravity lines where considerable settlement is expected. No plastic pipes are allowed in the levee embankment or its foundation unless they are embedded in concrete or encased in a steel conduit with the annular space completely grouted. All new and existing gravity-flowing culverts must have a flap gate on the waterside end with provisions for positive closure (slide gate or sluice

gate). The total area of disturbance, including staging and access areas, must not exceed five acres.

2.3.15 Horizontal Directional Drilling (HDD)

Pipes may be installed using HDD methods, where a pit is excavated on either side of the floodway and then pressure and drilling fluids are used to install the pipe beneath the levee embankment and/or channel. In general, the entry and exit points of the HDD pipe should be located no less than 300 feet from the landside toe of the levee. The pipeline should pass no less than 50 feet beneath the levee's landside toe. The total area of disturbance must not exceed five acres.

2.3.16 Landside Pump Stations

The proposed Categorical Permission would cover installation, modification, and replacement of landside pump stations and associated facilities. Heavy equipment, such as front end loaders and backhoes, may be used during construction. Whenever possible, pump stations should be located outside the levee easement. The total area of disturbance must not exceed one acre.

2.3.17 Pressurized Pipes

The proposed Categorical Permission would cover the installation, modification, and replacement of pressurized pipes. Heavy equipment, such as front end loaders and backhoes, may be used during construction. Pressurized pipes passing through the levee require a positive closure device on the waterside that is accessible from the levee crown. If the invert of the pipe is over the levee crown, the combination of a pump station on the waterside and a siphon breaker is considered an appropriate means of closure. No plastic pipes are allowed in the levee prism or its foundation unless they are embedded in concrete. Pressurized pipelines running parallel to flood risk management projects must be located greater than 15 feet from the levee toe. The preferred method for abandoning pipes that pass through or over a levee is complete removal. If removal is not feasible, the pipes and other structures may be filled with a cement/ bentonite-based grout or flowable fill. The total area of disturbance, including staging and access areas, must not exceed 5 acres.

2.3.18 Research and Monitoring

The proposed Categorical Permission would cover the installation, operation and replacement of scientific devices whose purpose is to measure and record data, including staff gauges, tide and current gauges, meteorological stations, water quality and chemical and biological observation devices. Also covered by the Categorical Permission are sonar, seismic and other acoustic surveys, including installation, operation, and replacement of equipment. Monitoring and exploration for natural resource and mapping are included. Fish and wildlife harvesting, enhancement and study activities are covered, including fyke and screw fish traps, electrofishing, and netting. For example, floating measuring devices must be securely anchored or tethered; deployment should be for the shortest time possible to achieve the desired goal. For longer term projects/research, regular inspections are necessary to ensure

that the device(s) remain serviceable and intact. A device inspection schedule and a plan for navigational aids must be provided. Upon completion of monitoring, the measuring device(s) and any associated structures and equipment (e.g., foundations, anchors, buoys, and lines) must be removed and the site restored to pre-project conditions. To prevent damage to the levees, heavy equipment (e.g., backhoes) required for research and monitoring activities is not allowed on levees when heavy rainfall has occurred or if the levee is saturated. The requester must verify that monitoring devices and associated equipment would not disrupt overhead wires or interfere with the public's access to navigation and/or recreation.

2.3.19 Retaining Walls

The proposed Categorical Permission would cover the construction, modification/repair, and replacement of existing retaining walls. Equipment such as dump trucks, cement trucks, and backhoes may be used during construction. All installation and operation should be designed to minimize adverse effects to the federal project and environment.

2.3.20 Seepage and Stability Berms

Seepage and stability berms may be constructed, modified, or replaced within the easement of the federal project. The construction site should be cleared and grubbed to a sufficient depth to remove vegetation, roots and soil containing roots. This material must be disposed of at an upland location(s) outside the federal project right-of-way and should not be used as fill. The resulting ground surface in the area(s) where the berm is to be located should be scarified to a depth of at least six inches or the full depth of shrinkage cracks, whichever is deeper. A variety of heavy equipment, including excavators, bulldozers, and work trucks, may be used during construction. The total area of ground disturbance must not exceed ten acres.

2.3.21 Stairs and Handrails

The proposed Categorical Permission would cover the installation, modification, and replacement of stairs and handrails. Handrails are not allowed on the waterside levee slope or on the levee crown. Stairs must be made of concrete, rock, brick, or other sufficiently durable inorganic materials, no wood or wood-based products are allowed.

2.3.22 Swimming Pools

Swimming pools and associated support facilities (e.g., plumbing, pool patios) may be installed, modified, and replaced. For pools within 300 feet of the levee embankment, the requester should provide a geotechnical analysis to ensure that the pool does not pose a serious risk to the levee. A variety of heavy equipment, such as excavators and bulldozers, may be used during construction. The total area of permanent disturbance associated with the proposed alteration must not exceed 2000 square feet.

2.3.23 Trails, Roads, and Ramps

The proposed Categorical Permission would cover the installation, modification, and replacement of trails, roads, access ramps, and associated signage, lighting, etc., within the federal project easement. Large equipment, such as compacters, sheep rollers, and

pavers, may be used to repair and/or construct trails/roads and large trucks may be used to haul material into the staging area or directly to the trail work area. To facilitate construction, all vegetation must be removed from the levee crown to a width two feet beyond the intended trail width. Gravel, asphalt, or concrete materials may be used in construction. The total area of construction for ramps must not exceed five acres in size and the total length of trails/roads must not exceed two miles.

2.3.24 Utility Poles

The proposed Categorical Permission would cover the installation, replacement, and replacement of utility poles/towers within the project easement. Additionally, this Categorical Permission would cover aerial utility lines associated with utility poles. In general, 25 feet is the minimum clearance allowed between the levee crown and the lowest point of the proposed utility wire crossing. Tower installation may require the installation of concrete slabs and footings or other types of foundations. The total area of permanent disturbance must not exceed one acre.

2.3.25 Water Supply Pump Stations

The proposed Categorical Permission would cover the installation, modification, and replacement of water supply pump stations and associated facilities. Heavy equipment, such as front end loaders and backhoes, may be used during construction. The total area of permanent disturbance must not exceed one acre.

2.3.26 Wells

The proposed Categorical Permission would cover the installation of wells. Wells must not be drilled within 300 feet of the landside toe or within 15 feet of the waterside levee toe. Wells may be installed using a truck mounted drilling rig. Any structures and fencing at well sites within the floodway must not impact the hydraulic functioning of the floodway. The location and design of wells must not interfere with access or with routine operation and maintenance of the levee and channel.

3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 SUMMARY

This chapter will discuss both the existing conditions in the analysis area and the environmental consequences of the alternatives. This chapter is organized by resource, with physical resources listed first, followed by biological resources, and social resources, and will only discuss relevant resources (those resources that would be affected by the alternatives or that would affect the alternatives). Relevant physical resources are air quality, noise, water quality, and wetlands. Relevant biological resources are fish and wildlife, invasive species, threatened and endangered species, and vegetation. Relevant social resources are aesthetics, cultural resources, farmland/agriculture, recreation, and transportation/traffic. The interdisciplinary planning team identified several resources that were determined to not be relevant; these are geology, hazardous materials, land use, minerals and energy resources,

socioeconomics, soils, climate, economic factors, population dynamics, and wilderness areas. These non-relevant resources will not be discussed further in this document.

3.1.1 Affected Environment and Environmental Consequences Summary

CEQ guidance directs agencies to succinctly describe the environment of the area(s) to be affected by the alternatives and to then discuss the environmental impacts of the alternatives (40 CFR 1502). CEQ instructs agencies to avoid "useless bulk", keeping the description of the affected environment only as long as necessary to understand the effects of the alternatives (40 CFR 1502.15). Because of the broad geographical scope of this document, it is not practical to describe the affected environment or detailed environmental consequences for each specific USACE project. For programmatic NEPA reviews, CEQ guidance states that a broad regional or landscape description may suffice for characterizing the affected environment, and directs agencies to focus reviews on the broad environmental consequences that are relevant at the programmatic level (CEQ 2014). Additionally, CEQ guidance states that "site- or project-specific impacts need not be fully evaluated at the programmatic level when the decision to act on a site development or its equivalent is yet to be made" (CEQ 2014). Additionally, CEQ guidance states that "the depth and detail in programmatic analyses will reflect the major broad and general impacts that might result from making broad programmatic decisions" (CEQ 2014). Following this guidance, the affected environment will describe the existing conditions in a general sense and will provide the baseline for the comparisons in the environmental consequences section.

As the implementation of a Categorical Permission to streamline the Section 408 review process would not involve any on-the-ground work, there are no anticipated direct effects to environmental resources resulting from the decision at hand. It is important to note that the decision to be made on the Categorical Permission would not authorize any specific Section 408 requests or any ground disturbing work. Although the decision on whether or not to implement the proposed Categorical Permission would not have direct impacts on resources, the types of alterations described under the proposed Categorical Permission have the potential to impact the relevant resources listed above. Therefore, the environmental consequences will reflect the major broad and general impacts that could result from the types of alterations described under the proposed Categorical Permission. In accordance with CEQ guidance, the description of the scope and range of impacts will be more qualitative in nature than standard project-specific NEPA reviews (CEQ 2014).

The environmental consequences will be discussed in terms of direct, indirect, and cumulative effects. CEQ defines direct effects as those effects caused by the action and occurring at the same time and place (40 CFR 1508.8). Indirect effects are those effects which are caused by the action, but are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). Cumulative effects are impacts which result from the "incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). Reasonably foreseeable future actions are actions that are planned and likely to occur.

For the purposes of this document, the terms effects and impacts are synonymous and used interchangeably.

3.1.2 Cumulative Effects Summary

The purpose of the cumulative effects analysis is "to ensure that federal decisions consider the full range of consequences of actions" (CEQ 1997). The premise of the cumulative effects analysis is that "cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." (40 CFR 1508.7). Cumulative effects are the total effect of all actions taken, no matter who (federal, nonfederal, or private) has taken the action, and may be additive or interactive. Cumulative effects must be analyzed in terms of the specific resource, ecosystem, and/or human community being affected. To accomplish this, one of the first steps of the cumulative effects analysis is to define the geographic and temporal scope. The boundaries for cumulative effects analysis generally do not line up with political or administrative boundaries, such as agency jurisdictional area, and must instead use natural ecological or sociocultural boundaries that are appropriate to each specific resource (CEQ 1997). Additionally, the "boundaries for evaluating cumulative effects should be expanded to the point at which the resource is no longer affected significantly or the effects are no longer of interest to affected parties" (CEQ 1997). For example, the cumulative effects analysis geographic scope for water resources may be an entire watershed.

The cumulative effects analysis in this document will consider past, present, and reasonably foreseeable future actions that influence the geographic areas where USACE projects exist. Per CEQ guidance, the geographic scope for cumulative effects analysis in this document may vary by resource. The temporal scope of analysis for all resources extends five years into the future (the proposed initial length of the Categorical Permission before it is re-evaluated) and fifty years into the past. In accordance with CEQ guidance, the cumulative effects analysis in this PEA will focus on major broad and general impacts and will be qualitative in nature. Table 1 summarizes the past, present, and reasonably foreseeable activities that may contribute to cumulative effects, as well as the general effects that these activities may have on the three major resource categories. Cumulative effects will be further discussed for each specific resource.

Table 1. Summary of activities contributing to cumulative effects. Table 1 summarizes the past, present, and reasonably foreseeable future actions that are likely to occur in the geographic areas where USACE projects exist, as well as the general effects that they may have on the major resource categories. Table 1 includes actions regardless of who has taken, or may take the action.

Past, Present, and Reasonably Foreseeable Future Actions	**General Effects on Physical Resources**	**General Effects on Biological Resources**	**General Effects on Social Resources**
Agricultural Activities	- Generation of criteria air pollutants - Increased dust - Increased noise - Loss of wetland habitat	- Direct mortality or injury - Behavioral disturbance - Noise effects - Habitat loss - Habitat disturbance - Introduction of invasive species	- Visual effects - Disturbance of cultural resources - Effects on recreation - Effects on farmland
Construction Activities	- Generation of criteria pollutants - Increased dust - Increased noise - Water contamination - Loss of wetland habitat	- Direct mortality or injury - Behavioral disturbance - Noise effects - Habitat loss - Habitat disturbance - Introduction of invasive species	- Visual effects - Disturbance of cultural resources - Increased vehicle traffic - Effects on recreation - Effects on farmland

Past, Present, and Reasonably Foreseeable Future Actions	General Effects on Physical Resources	General Effects on Biological Resources	General Effects on Social Resources
Fishing (including recreational and commercial)	- Generation of criteria pollutants - Increased noise - Increased turbidity - Water contamination - Generation of debris	- Direct mortality or injury - Behavioral effects - Noise effects - Habitat disturbance - Altered or reduced prey sources - Behavioral disturbance - Introduction of invasive species	- Increased recreation
Industry (not including construction activities)	- Generation of criteria pollutants - Increased dust - Increased noise - Increased turbidity and sedimentation - Water contamination - Loss of wetland habitat	- Direct mortality or injury - Behavioral disturbance - Noise effects - Habitat loss - Habitat disturbance	- Visual effects - Disturbance of cultural resources - Increased vehicle traffic - Effects on recreation - Effects on farmland

Past, Present, and Reasonably Foreseeable Future Actions	General Effects on Physical Resources	General Effects on Biological Resources	General Effects on Social Resources
Levee and Channel Operations and Maintenance	- Generation of criteria pollutants - Increased dust - Increased noise - Increased or decreased turbidity and sedimentation - Water contamination	- Direct mortality or injury - Behavioral disturbance - Noise effects - Habitat loss - Habitat disturbance - Introduction and/or removal of invasive species	- Visual effects - Disturbance of cultural resources - Effects on recreation - Effects on farmland
Recreation	- Generation of criteria pollutants - Increased noise - Increased turbidity - Water contamination	- Direct mortality or injury - Behavioral disturbance - Noise effects - Habitat loss - Habitat disturbance - Altered or reduced prey sources - Introduction of invasive species	- Disturbance of cultural resources - Increased recreation

Past, Present, and Reasonably Foreseeable Future Actions	General Effects on Physical Resources	General Effects on Biological Resources	General Effects on Social Resources
Restoration	- Improved water quality - Increase in wetland habitat	- Direct mortality or injury - Behavioral disturbance - Increase in habitat - Improvement of existing habitat - Habitat disturbance - Increase in native vegetation - Introduction and/or removal of invasive species	- Visual effects - Disturbance of cultural resources - Improved recreational opportunities - Effects on farmland
Scientific Research	- Generation of criteria pollutants - Increased turbidity - Water contamination	- Direct mortality or injury - Behavioral disturbance - Habitat disturbance	- Disturbance of cultural resources
Vehicle Traffic	- Generation of criteria pollutants - Increased dust - Increased noise - Water contamination	- Direct mortality or injury - Behavioral disturbance - Noise effects	- Disturbance of cultural resources - Effects on transportation

3.2 AIR QUALITY

3.2.1 Affected Environment

Air quality is determined by a variety of factors, including the locations of air pollutant sources, the amount of pollutants emitted, topography, and meteorological conditions, such temperature, wind speed, etc. The Clean Air Act of 1970, as amended (42 U.S.C. 7401 *et seq*.) regulates air emissions from stationary and mobile sources and authorizes the USEPA to establish National Ambient Air Quality Standards (NAAQS) to protect public health and welfare and to regulate emissions of hazardous air pollutants. The USEPA has established NAAQS for six criteria pollutants, lead, ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and particulate matter (particulate matter smaller than 10 microns in diameter [PM10] and particulate matter smaller than 2.5 microns in diameter [PM2.5]). Additionally, the Clean Air Act requires that state, local, federal, and tribal governments implement the Act in partnership. States and tribes submit recommendations to the USEPA as to whether or not an area is attaining the NAAQS for criteria pollutants. Areas that meet or exceed the national standard for a pollutant are designated as "attainment" areas for that particular pollutant. Areas that do not meet the national standard for a pollutant are designated as "nonattainment" areas for that specific pollutant. A maintenance area is an area that was designated as nonattainment, but has been re-designated to attainment and has an approved maintenance plan (40 CFR § 93.152). Nonattainment and maintenance areas are further classified as "marginal", "moderate", "severe", or "extreme". States and tribes are also responsible for developing state and tribal implementation plans (SIPs and TIPs respectively) to meet the national standards (USEPA 2017a).

Section 176(C) of the Clean Air Act prohibits federal agencies from carrying out, funding, or permitting any activity in a nonattainment or maintenance area "which does not conform to an implementation plan after it has been approved or promulgated" (42 U.S.C. 7506). This is known as the General Conformity rule; under General Conformity, federal agencies must work with state, tribal, and local governments in nonattainment and maintenance areas to ensure that federal actions conform to established air quality implementation plans. Federal actions that result in the emission of air pollutants in attainment areas or undesignated areas are not subject to the requirements of the General Conformity rule. Many federal actions in nonattainment and maintenance areas do not result in significant increases in emissions; therefore, the USEPA has designated *de minimis* emissions levels, based on an area's designation and classification, for each of the criteria pollutants. If the total direct and indirect emissions from a proposed federal action are below *de minimis* levels, the action is exempt from conformity determination requirements. If the total direct and indirect emissions from a proposed federal action are above *de minimis* levels, then a General Conformity analysis is required (USEPA 2017a). To achieve conformity, a federal action must conform to the applicable SIP/TIP and not "contribute to new violations of standards for ambient air quality, increase the frequency or severity of existing violations, or delay timely attainment of standards in the area of concern" (USDOE 2000).

California is divided into fifteen air basins that contain a number of air districts that have local jurisdiction over air quality. Air quality in Colorado, Nevada, and Utah is tracked at

the county level. Federal projects in the Sacramento District fall within the following seven California air basins: Lake County, Lake Tahoe, Mountain Counties, Northeast Plateau, Sacramento Valley, San Francisco Bay Area, and San Joaquin Valley (Figure 6). Federal projects in the Sacramento District fall within the following counties outside of California: Mesa County, Colorado; Lander, Lyon, Storey, and Washoe Counties, Nevada; and Beaver, Davis, Salt Lake, Sanpete, and Sevier Counties, Utah (Figures 6 and 7). The geographic scope of analysis for this document will be the seven California air basins and the ten counties previously listed.

All of the California air basins and all of the counties outside of California that are included in this analysis are at attainment for lead, NO_2, and SO_2 (Table 2). Plumas County and the San Joaquin Valley air basin are at nonattainment for PM2.5 (Table 2 and Figure 8). Salt Lake County is at nonattainment and Sacramento and Washoe Counties, and the San Joaquin Valley air basin are at maintenance for PM10 (Table 2 and Figure 9). The San Joaquin Valley and the San Francisco Bay Area air basins; Butte, Calaveras, El Dorado (partial), Nevada, Mariposa, Placer, Sacramento, Solano, Sutter, and Yolo Counties; and the city of Tuscan Buttes are at nonattainment for 8-hour ozone (Table 2 and Figure 10). The Lake Tahoe air basin and the following cities are at maintenance for CO: Chico, Fresno, Modesto, Sacramento, Salt Lake City, San Francisco-Oakland-San Jose metro area, Bakersfield, Reno, and Stockton (Table 2 and Figure 11).

Figure 6. Map of California air basins and Nevada counties that contain USACE Sacramento District federal projects.

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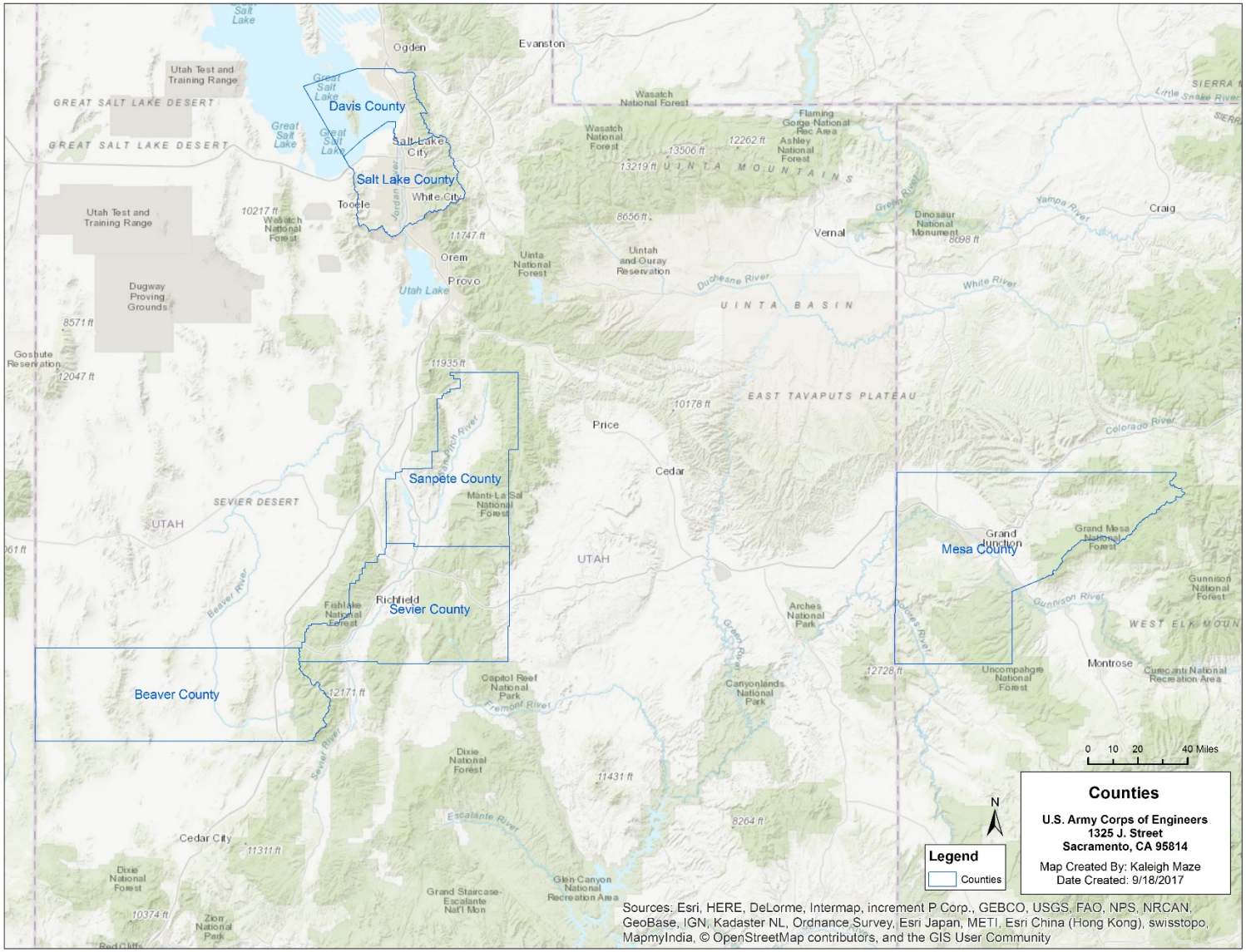

Figure 7. Map of Utah and Colorado counties that contain USACE Sacramento District federal projects.

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Table 2. Current (as of April 30, 2018) status of air basins and counties for criteria pollutants using current NAAQS. Data were obtained from the USEPA "Green Book" on May 15, 2018, and are only shown for air basins and counties that have a Sacramento District USACE project located within the basin/county.

Area	**PM2.5 (2012 Standard)**	**PM10 (1987 Standard)**	**8-hour ozone (2008 Standard)**	**Lead (2008 Standard)**	**NO_2 (1971 Standard)**	**SO_2 (2010 Standard)**	**CO (1971 Standard)**
Lake County air basin, CA	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment
Lake Tahoe air basin, CA	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Moderate Maintenance
Mountain Counties air basin, CA	Moderate Nonattainment (Plumas County)	Attainment	Nonattainment (Calaveras County – Marginal; Nevada and Mariposa Counties – Moderate)	Attainment	Attainment	Attainment	Attainment
Northeast Plateau air basin, CA	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment

Area	**PM2.5 (2012 Standard)**	**PM10 (1987 Standard)**	**8-hour ozone (2008 Standard)**	**Lead (2008 Standard)**	**NO_2 (1971 Standard)**	**SO_2 (2010 Standard)**	**CO (1971 Standard)**
Sacramento Valley air basin, CA	Attainment	Moderate Maintenance (Sacramento County)	Nonattainment (Butte County and the City of Tuscan Buttes – Marginal; El Dorado [partial], Placer [partial], Sacramento, Solano [partial], Sutter. [partial], and Yolo Counties – Severe)	Attainment	Attainment	Attainment	Moderate Maintenance (Cities of Chico and Sacramento)
San Francisco Bay Area air basin, CA	Attainment	Attainment	Marginal Nonattainment	Attainment	Attainment	Attainment	Moderate Maintenance (San Francisco-Oakland-San Jose metro area)
San Joaquin Valley air basin, CA	Moderate Nonattainment	Serious Maintenance	Extreme Nonattainment	Attainment	Attainment	Attainment	Moderate Maintenance (Cities of Bakersfield, Fresno, Modesto, and Stockton)
Beaver County, UT	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment
Davis County, UT	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment

Area	PM2.5 (2012 Standard)	PM10 (1987 Standard)	8-hour ozone (2008 Standard)	Lead (2008 Standard)	NO_2 (1971 Standard)	SO_2 (2010 Standard)	CO (1971 Standard)
Lander County, NV	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment
Lyon County, NV	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment
Mesa County, CO	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment
Salt Lake County, UT	Attainment	Moderate Nonattainment	Attainment	Attainment	Attainment	Attainment	Maintenance (Salt Lake City)
Sanpete County, UT	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment
Sevier County, UT	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment
Storey County, NV	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment
Washoe County, NV	Attainment	Serious Maintenance	Attainment	Attainment	Attainment	Attainment	Moderate Maintenance (City of Reno)

Figure 8. Map showing areas within the USACE Sacramento District boundary that, as of June 20, 2017, are at nonattainment for particulate matter 2.5. Data were obtained from the USEPA "Green Book" on July 11, 2017.

Figure 9. Map showing areas within the USACE Sacramento District boundary that, as of June 20, 2017, are at nonattainment or maintenance for particulate matter 10. Data were obtained from the USEPA "Green Book" on July 11, 2017.

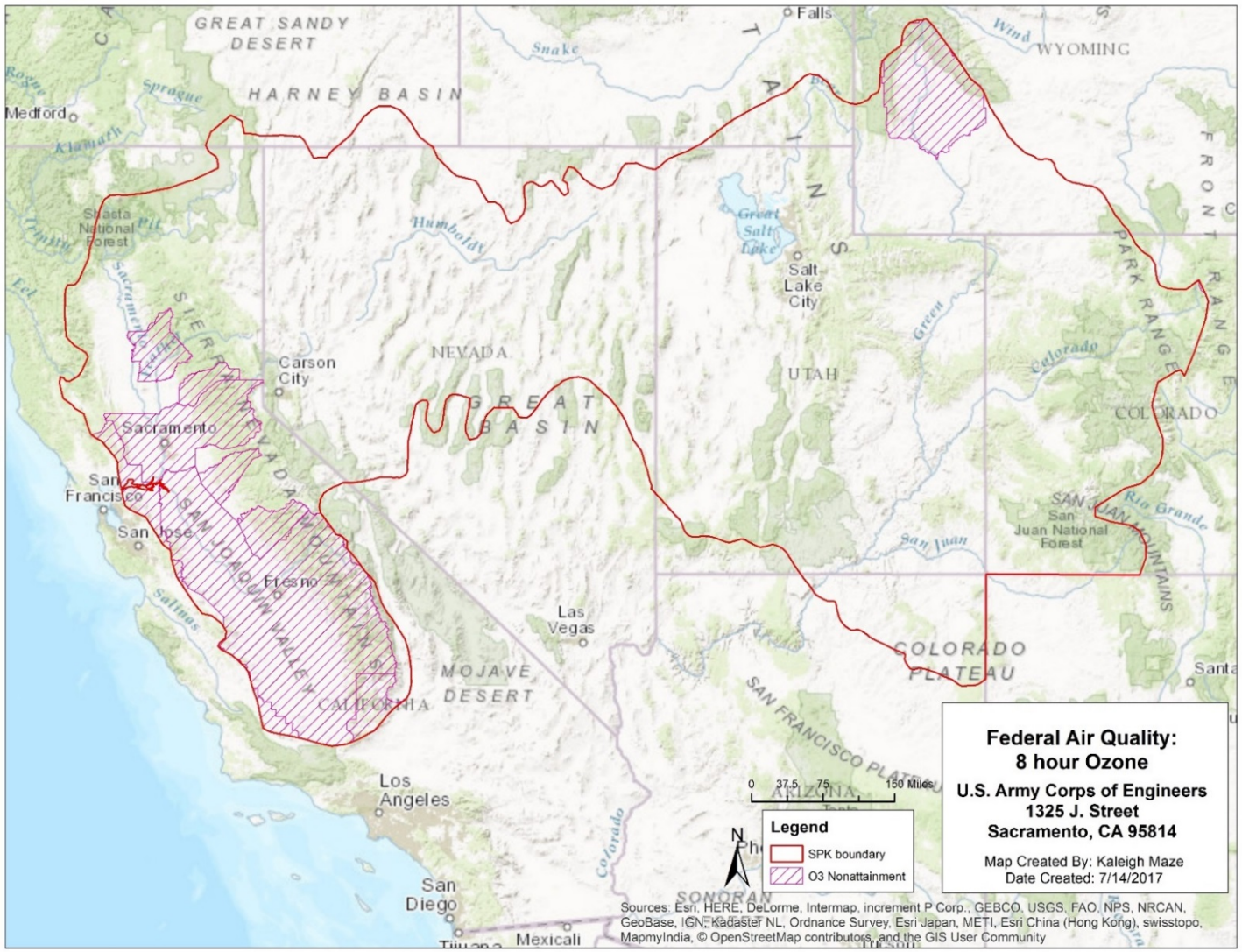

Figure 10. Map showing areas within the USACE Sacramento District boundary that, as of June 20, 2017, are at nonattainment for 8-hour ozone. Data were obtained from the USEPA "Green Book" on July 11, 2017.

Figure 11. Map showing areas within the USACE Sacramento District boundary that, as of June 20, 2017, are at nonattainment for carbon monoxide. Data were obtained from the USEPA "Green Book" on July 11, 2017.

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3.2.2 Direct and Indirect Effects

3.2.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently followed. Each Section 408 request would be individually evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, environmental assessment [EA], or environmental impact statement [EIS]). The potential effects on air quality that proposed alterations processed under the No Action Alternative could have are the same as the effects described for the Preferred Alternative. Currently, the Sacramento District conducts a General Conformity review for each individual Section 408 alteration request. Under the No Action Alternative, the Sacramento District would continue to conduct a General Conformity review for each individual Section 408 alteration request, and would conduct General Conformity analyses as appropriate (see Section 3.2.1).

3.2.2.2 Preferred Alternative

The majority of the alterations described under the proposed Categorical Permission (Section 2.3) have relatively short construction time-frames and use a minimal amount of construction equipment. Emissions from these types of alterations are generally minor and limited to construction and thus temporary. Alterations of similar scale and scope that have received Section 408 permissions in the past have generally had emissions below *de minimis* levels. Under the Preferred Alternative, the Sacramento District would continue to conduct a General Conformity review for each individual Section 408 alteration request. The proposed Categorical Permission would only be applicable to proposed alterations that have emissions below the *de minimis* levels for criteria air pollutants and are thus exempted by 40 CFR 93.153. If emissions from a proposed alteration are expected to exceed *de minimis* levels, then the proposed Categorical Permission would not apply and the Section 408 alteration request would undergo a standard review process as described under Section 3.2.2.1.

3.2.3 Cumulative Effects

The geographic boundaries for the cumulative effects analysis are the seven air basins in California and the ten counties in Colorado, Nevada, and Utah that contain USACE federal projects (Figures 4 and 5). The major past activities affecting air quality in this geographic analysis area are agriculture, construction, industry, and vehicle traffic. The major present, and reasonably foreseeable future activities that could potentially affect air quality in this geographic analysis area are agriculture, construction, fishing (including recreational and commercial), industry, levee and channel operation and maintenance, recreation, restoration, scientific research, and vehicle traffic. All of these activities, barring restoration activities, could generate emissions of criteria pollutants and some could result in increased dust (Table 1).

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in the issuance of a slightly higher number of Section 408 permissions per year. The general direct and indirect effects of the types of

alterations described in the Categorical Permission are discussed in Section 3.2.2.2. As the Categorical Permission would only apply to alterations with emissions below *de minimis* levels, implementation of the proposed Categorical Permission would result in either no contribution, or a minor negative contribution to cumulative effects on air quality in the geographic analysis area. Given that the potential effects on air quality that the No Action Alternative could have are the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in either no contribution, or a minor negative contribution to cumulative effects on air quality in the geographic analysis area.

3.3 NOISE

3.3.1 Affected Environment

The Noise Control Act of 1972, as amended (42 U.S.C. 4901 *et seq*.) established a national policy to promote an environment for all Americans free from noise that jeopardizes their health or welfare. Background noise levels at USACE federal projects within the Sacramento District are dependent on where the project is located. Noise levels at projects, regardless of location, tend to be governed by boat traffic on nearby waterways, agricultural equipment, light to moderate traffic on local roads, and moderate to heavy traffic on nearby interstates and high-volume highways. In addition, some projects are located near airports, which may have elevated noise levels due to air traffic. Locations where people live or where the presence of elevated noise levels could significantly affect the use of the land, are considered to be noise sensitive areas. Noise sensitive receptors can include residents near the federal project, schools, hospitals, nursing homes or assisted living facilities, parks, and businesses, among others. Many of the federal projects within the Sacramento District, particularly those in suburban or urban settings, are located near one or more sensitive receptors.

3.3.2 Direct and Indirect Effects

3.3.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently used. Each Section 408 request would be individually evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, EA, or EIS). The potential effects from noise that proposed alterations processed under the No Action Alternative are the same as the effects described for the Preferred Alternative.

3.3.2.2 Preferred Alternative

All of the alterations described under this Categorical Permission would result in some level of noise during construction that would rise above the existing conditions. Elevated noise levels could have different types of impacts depending on where the proposed alteration is located. If the proposed alteration is located near a sensitive receptor, usually common in urban and suburban settings, noise could directly impact that receptor. Noise can have a number of effects on human health and well-being.

Excessive exposure to elevated noise levels can result in hearing loss, interfere with communication, disturb sleep, and can act as a biological stressor, resulting in non-auditory physiological responses (USEPA 1981).

Fish and wildlife can also be affected by elevated noise levels. Species differ in their sensitivities and responses to noise exposure, and there can even be differences in sensitivity within species due to life-history stage and behavioral context. Noise stimuli may act as a distraction, startle animals into fleeing or hiding, and can mask biologically relevant sounds used for communication, detection of threats or prey, and spatial navigation (Francis and Barber 2013). Fish are sensitive to loud noises in waterways, with sound generated from percussive pile driving having particularly negative impacts. Exposure to increased sound levels, either low levels over long periods of time, or high levels for shorter periods of time, may result in damage to fish auditory tissue and may even result in temporary hearing loss (Caltrans 2015). Increased sound levels may alter fish behavior or even lead to mortality.

The effects of noise associated with the alterations described under this Categorical Permission could range from non-noticeable from the existing conditions, to noticeable. Proposed alterations would be subject to local noise ordinances, which may restrict the days of the week and/or the times of day during which construction may take place.

3.3.3 Cumulative Effects

The geographic analysis area for cumulative effects includes all areas within one mile of a USACE federal project within the Sacramento District. One mile is estimated to be the maximum distance that noise created by an alteration to the USACE project could be heard. The primary activities that could potentially affect noise in this geographic analysis area are agriculture, construction, fishing (including recreational and commercial), industry, levee and channel operation and maintenance, recreation, restoration, scientific research, and vehicle traffic. All of these activities could result in increased levels of noise (Table 1).

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in the issuance of a slightly higher number of Section 408 permissions per year. The issuance of more Section 408 permissions could result in the construction of more alterations per year. The general direct and indirect effects of the types of alterations described in the Categorical Permission are discussed in Section 3.3.2.2. Given these effects, implementation of the proposed Categorical Permission would result in either no contribution, or a minor negative contribution to cumulative effects on noise in the geographic analysis area. Given that the potential effects on noise that the No Action Alternative could have are essentially the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in either no contribution, or a minor negative contribution to cumulative effects on noise in the geographic analysis area.

3.4 WATER QUALITY

3.4.1 Affected Environment

Individual states have the responsibility to manage water quality within their states. Section 303(d) of the Clean Water Act (33 U.S.C. §1313 *et seq*.) requires states to identify waterbodies where current pollution control methods alone cannot meet the water quality standards set for that waterbody. Every two years, states are required to submit to the USEPA a list of impaired waters; states must also establish the total maximum daily loads (TMDLs) of pollutants for impaired waters on their list (40 CFR §130.7).

Federal projects in the Sacramento District are located along a number of diverse river systems across twelve major basins in four states (Figures 10 and 11). The majority of the USACE federal projects are located in California, within the Sacramento (both Upper and Lower) and San Joaquin basins, with fewer projects located in the San Francisco Bay and Tulare-Buena Vista Lakes basins (Figure 12). Sacramento District federal projects in Nevada are located in the Humboldt, Truckee, and Walker basins (Figure 12). Federal projects in Utah are located in the Weber, Jordan, and Escalante Desert-Sevier Lake basins and the one Sacramento District federal project in Colorado is located in the Colorado Headwaters basin (Figure 13).

Many stream segments within the Sacramento basin are listed under Section 303(d) of the Clean Water Act as impaired (USEPA 2012a, Wood *et al*. 2016; Figure 12). However, most of the major streams and rivers in the Sacramento basin are derived from melting snow, which helps to seasonally dilute contaminants (Domalgalski *et al.* 2000). The reasons for impairment are varied and depend upon the specific watershed, although some of the major contributors to impairment in rivers and streams are sediment, temperature, metals, organic enrichment, and nutrients. The probable sources contributing to impairments are varied and include hydromodification, silviculture, agriculture, and mining, among many other probable sources. The presence of pesticide contaminants from agricultural operations in the Central Valley (Ficklin *et al.* 2013) and elevated mercury concentrations due to geological deposits, mining of mercury, and the use of mercury in historic gold mining operations (Domalgalski 2001) are of particular concern due to their negative effects on anadromous fish species.

Many stream and river segments within the Sacramento-San Joaquin River Delta ("Delta") were on California's 2012 list of impaired waters (USEPA 2012a; Figure 12). Testing has shown that mercury and PCBs are the main contaminants of concern, although pesticides are also a source of toxicity, particularly in association with runoff events (SWAMP 2006).

Water quality in the San Joaquin and Tulare-Buena Vista Lakes basins has much of the same issues as the Sacramento basin, with mercury contamination and pesticide runoff from agricultural fields being of particular concern (Dubrovsky *et al.* 1998). Most of the surface water in these basins originates as snowmelt runoff in the Sierra Nevada Mountains, which is fairly uncontaminated and of high quality. As this uncontaminated water enters the San Joaquin Valley, major changes in water quality occur, largely due to runoff from agricultural fields (Dubrovsky *et al.* 1998). Many of the streams and rivers

in these basins were listed on California's 2012 list of impaired waters (USEPA 2012a; Figure 12).

The major river in the Truckee basin in Nevada is the Truckee River, which flows from Lake Tahoe in the Sierra Nevada east to Pyramid Lake, a desert terminus lake. The Truckee River was listed on the Nevada 2014 list of impaired waterbodies, largely due to high temperatures, nutrient concentrations, and turbidity (USEPA 2014a). A number of organic compounds, including gasoline hydrocarbons, solvents, and pesticides, have been detected in the Truckee River near Reno; however, the levels of these compounds have been fairly low. There are several other streams or rivers listed as impaired in the Truckee basin, largely in the vicinity of Reno and Carson City (Figure 12). There are several streams and rivers that were listed in 2014 as impaired in the Walker basin, although the West Walker River in the vicinity of the USACE federal project in this basin is not impaired (USEPA 2014a). There are also a number of streams and rivers that were included on the 2014 Nevada list as impaired in the Humboldt basin, although the Reese River in the vicinity of the USACE federal project in this basin is not impaired (USEPA 2014a; Figure 12).

The major river in the Escalante Desert-Sevier Lake basin is the Sevier River, which starts in the mountains of southern Utah and flows over 380 river miles north into Sevier Lake. The major land uses in this basin are agriculture, rangeland, and recreation (Utah State University 2012). Various stream and river segments throughout the basin were included on the 2014 Utah list of impaired waterbodies (USEPA 2014b; Figure 13). Over the years, some of the parameters that have caused impairments in this basin have been high salinity, excess phosphorus, and excess sediment (USEPA 2014b, UDEQ 2004a, UDEQ 2004b). Some of the probable sources of these parameters are the natural geologic formations of the basin, agricultural irrigation, livestock, and streambank erosion, among other potential sources (UDEQ 2004a).

There are a number of stream and river segments in the Jordan basin that were included on Utah's 2014 list of impaired waters, including the Jordan River itself (USEPA 2014a; Figure 13). Some of the major impairments in the Jordan basin are metals, habitat alterations, low levels of dissolved oxygen, high water temperatures, and pH (Toole 2002, UDEQ 2013). Some of the factors influencing water quality are mining, habitat modification, hydromodification, and agricultural activities. Urban storm-water runoff is another source of impairment, particularly in the lower Jordan River in Salt Lake City (Toole 2002), adjacent to the USACE federal project (the Jordan River Surplus Canal) in this basin.

The Weber River basin contains a mix of agricultural and urban land uses and includes approximately 1,254 miles of intermittent streams and 968 miles of perennial streams, including the Weber River (UDEQ 2000). Segments of several streams and rivers in this basin were included on the 2014 Utah list of impaired waters (USEPA 2014b). Some of the main causes of impairment are high levels of nutrients, particularly phosphorus, high levels of sediment and metals, and low levels of dissolved oxygen. The probable factors influencing water quality are similar to the main causes in the Jordan basin, and include hydromodification, agricultural activities, and oil and gas modification (USEPA 2014b, UDEQ 2000). The Weber basin contains one USACE

federal project, located at Kays Creek in Layton, Utah (Figure 13). Kays Creek was listed on Utah's 2014 list of impaired waters due to *E. coli* pathogens (USEPA 2014b).

The Colorado Headwaters basin encompasses a large area and the water quality is influenced by a number of factors, including natural geologic factors, agriculture, abandoned/inactive mines, and urban development (Spahr *et al.* 2000). There are a number of stream and river segments in this basin that are listed as impaired on Colorado's 2012 list of impaired waters, with the majority of these concentrated in the western part of the basin (Figure 13). Some of the causes of impairment are high concentrations of pesticides and metals, high nutrient and sediment levels, and high levels of pathogens (Spahr *et al.* 2000). The one USACE federal project in Colorado is located on the Colorado River at the confluence of the Colorado and Gunnison Rivers in Grand Junction (Figure 13). The Colorado River water quality is good at this location, but the Gunnison River at this location was included on Colorado's 2012 list of impaired waters as impaired due to high levels of *E. coli* and selenium (USEPA 2012b).

Figure 12. Map showing California and Nevada streams and rivers listed by the USEPA under Section 303(d) of the Clean Water Act as impaired, located within the eight digit Hydrologic Unit Code (HUC) areas (basins) that contain Sacramento District federal projects in these states. Data shown for California are from the 2010 reporting cycle and data shown for Nevada are from the 2012 reporting cycle.

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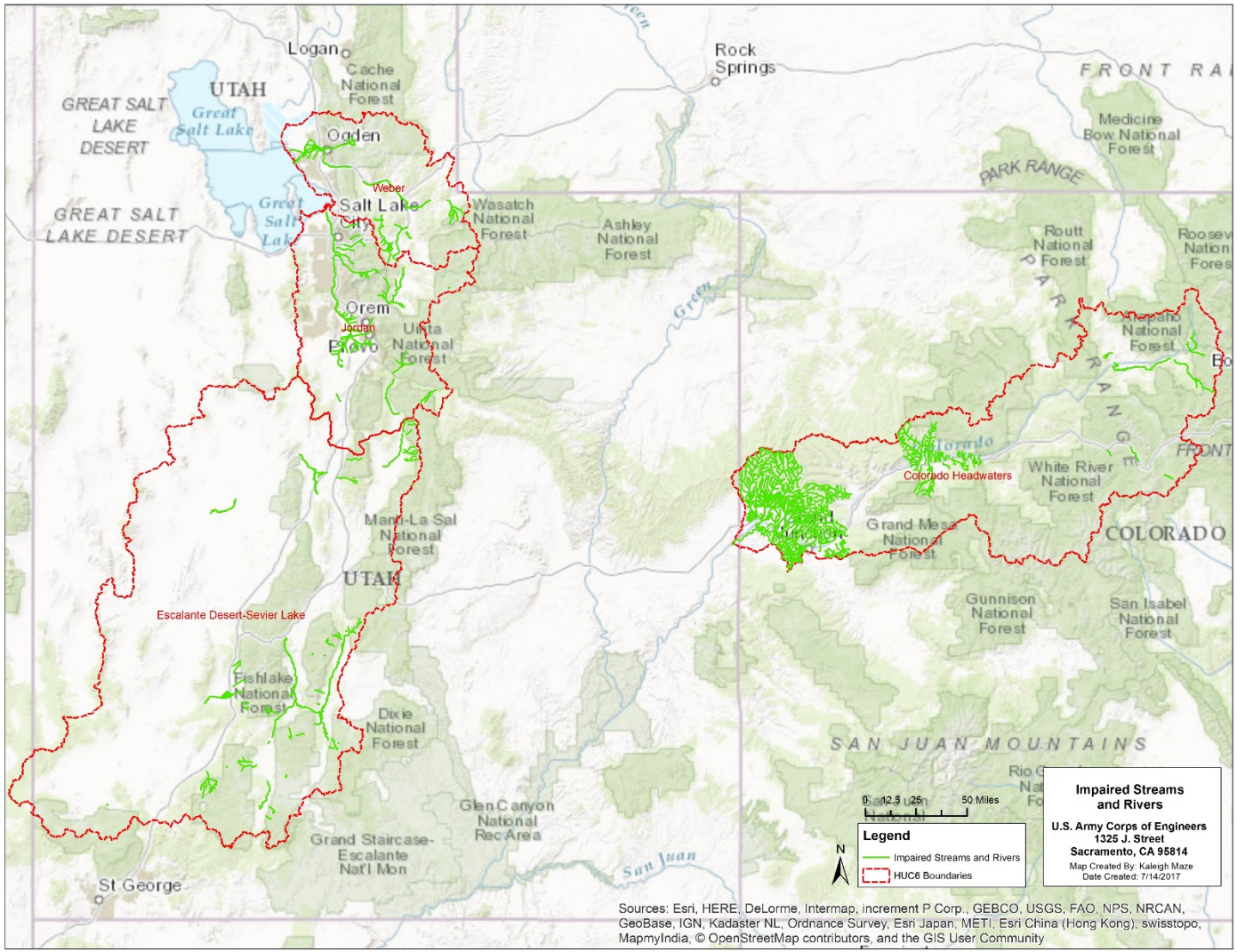

Figure 13. Map showing Utah and Colorado streams and rivers listed by the USEPA under Section 303(d) of the Clean Water Act as impaired, located within the four digit HUC areas (basins) that contain Sacramento District federal projects in these states. Data shown for both states are from the 2010 reporting cycle.

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3.4.2 Direct and Indirect Effects

3.4.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently used. Each Section 408 request would be individually evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, EA, or EIS). The potential effects on water quality that proposed alterations processed under the No Action Alternative could have are the same as the effects described for the Preferred Alternative.

3.4.2.2 Preferred Alternative

Some Section 408 requests that the Sacramento District receives are for alterations that are landside of a levee or are not located in or near water and do not have any effect on water quality. However, many of the types of alterations described under the proposed Categorical Permission could have effects on water quality. In some cases proposed alterations could have a negative impact on water quality, but in other cases proposed alterations could have an overall beneficial effect.

The construction of proposed alterations could negatively affect water quality by causing erosion into nearby water, increasing turbidity and decreasing water clarity. Turbidity can contribute to poor water quality and is one of the leading causes of impaired water quality in the Truckee River. Erosion can also mobilize heavy metals in the soil, leading to contamination of nearby water. Besides contributing to erosion, construction equipment can spill fuel or other fluids, potentially leading to water contamination. However, in order for a proposed alteration to fit under the Categorical Permission, BMPs to minimize erosion and spills must be incorporated into the construction plans. Additionally, any water quality impacts of construction of proposed alterations are expected to be temporary. The operations and maintenance of some proposed alterations may, however, also negatively affect water quality. For example, stormwater outfalls can release water contaminated by pollutants or highly turbid water into waterways, decreasing water quality. These types of water quality impacts are expected to be temporary.

Although construction activities generally have the potential to negatively affect water quality temporarily, some proposed alterations may have long-term beneficial effects on water quality. For example, erosion control and bank stabilization projects are expected to result over time in less erosion into waterways and thus are expected to contribute positively to water quality. Environmental restoration projects are another example of alterations that could have temporary negative impacts on water quality, but long-term beneficial effects.

3.4.3 Cumulative Effects

The geographic boundaries for the cumulative effects analysis are the HUC 6 basins shown in Figures 12 and 13. The major past activities affecting water quality in this geographic analysis area are agriculture, construction, and industry. The major present,

and reasonably foreseeable future activities that could potentially affect water quality in this geographic analysis area are agriculture, construction, fishing (including recreational and commercial), industry, levee and channel operation and maintenance, recreation, restoration, scientific research, and vehicle traffic.

As described in Section 3.4.1, runoff from agricultural fields is a source of impaired water quality across the geographic analysis area. Past contamination has contributed to existing poor conditions and present and future contamination is expected to continue having an effect on water quality. Past industrial runoff, particularly waste from mining operations, has been a major contributor to poor water quality in many areas throughout the Sacramento District. Historic gold and mercury mining operations in California are known to have played a large part in current poor water conditions in the Sacramento and San Joaquin Valleys. Although industrial runoff is now more regulated, contamination from mining and other industries still contributes to poor water quality and is expected to continue into the future. As described in Section 3.4.2.2., construction activities can contribute temporarily to poor water quality by increasing sedimentation and turbidity and introducing contaminants into the water system. Additionally, construction of projects like dams, housing developments, stormwater drainage systems, etc. can lead indirectly to long term contributions to poor water quality.

Fishing, levee and channel maintenance, recreation, scientific research, and vehicle traffic are all expected to contribute to poor water quality currently and into the future. These types of activities can increase turbidity and sedimentation and can introduce contaminants, such as pesticides and vehicle fluids, into the water system. Scientific research has the potential to positively influence water quality by increasing scientific knowledge regarding water quality issues in the geographic analysis area. Habitat restoration also has the potential to positively influence water quality by restoring ecological function to degraded areas.

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in the issuance of a slightly higher number of Section 408 permissions per year. The general direct and indirect effects of the types of alterations described in the Categorical Permission are discussed in Section 3.4.2.2. These types of alterations generally have minor and temporary highly localized effects on water quality; therefore, implementation of the proposed Categorical Permission would result in a minor negative contribution to cumulative effects on water quality in the geographic analysis area. Given that the potential effects on water quality that the No Action Alternative could have are essentially the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in a minor negative contribution to cumulative effects on water quality in the geographic analysis area.

3.5 WETLANDS AND OTHER WATERS

3.5.1 Affected Environment

Wetlands and other waters, such as streams and rivers, are frequently located in the vicinity of USACE federal projects. Many of these waters, particularly wetlands, are highly productive and biologically diverse. Waters provide important habitat for flora

and fauna and also provide a variety of functions and services. For example, some of the functions that wetlands provide are nutrient and sediment removal, shoreline erosion control, flood-peak attenuation, and groundwater recharge (Zedler 2000). These functions then lead to services which contribute to human welfare, such as aesthetics, recreation, flood protection, improved water quality, and biodiversity support (King *et al.* 2000).

Although there are waters located in the vicinity of the majority of USACE federal projects in the Sacramento District, many have been lost or degraded through urban expansion and agriculture. The Central Valley of California in particular has experienced widespread loss or degradation of streams and wetlands. Despite these losses, remnant areas, including riparian channels, seasonal wetlands, freshwater marshes, and streams persist throughout the Sacramento District.

Section 404 of the Clean Water Act (33 U.S.C. 1344 *et seq*.) regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The USACE Regulatory Program evaluates applications for activities proposed in waters of the United States. Section 401 of the Clean Water Act requires that applicants for federal permits provide certification from the state that discharges will comply with the Act and state-established water quality standards (Copeland 2015).

In addition, USACE Regulatory also ensures unobstructed navigation through regulation of activities in navigable waters, many of which in Sacramento District lie adjacent to USACE federal levees. Under Section 10 of the Rivers and Harbors Act of 1899, USACE regulates all work in, over and under navigable waters of the U.S.

3.5.2 Direct and Indirect Effects

3.5.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently used. Each Section 408 request would be individually evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, EA, or EIS). The potential effects on waters that proposed alterations processed under the No Action Alternative could have are the same as the effects described for the Preferred Alternative. Section 404 of the Clean Water Act requires authorization from USACE for activities that would result in discharge of dredged or fill material into waters of the United States, including wetlands, while work proposed in navigable waters requires authorization under Section 10 of the Rivers and Harbors Act. Before a Section 408 permission is issued, the Sacramento District 408 Permission Section coordinates with the Regulatory Division to determine if the proposed alteration requires authorization under Section 404 and/or Section 10. If a permit under Section 404 and/or Section 10 is needed, 408 Permission Section and Regulatory Division staff coordinate the two actions to ensure consistency. In addition, EC 1165-2-220 specifies that if a Section 401 Water Quality Certification is necessary for an alteration, then the Section 408 permission cannot be granted until the

Section 401 certification has been obtained or waived. Regulatory Division also requires compliance with Section 401 before authorization under Section 404.

3.5.2.2 Preferred Alternative

Some of the alterations described under this Categorical Permission could result in the discharge of fill or dredged material to wetlands or other waters of the United States. Some of these alterations could result in permanent impacts to waters, while others would result in no impacts or only temporary impacts to waters.

Under the Preferred Alternative, the Sacramento District 408 Permission Section would continue to individually evaluate each Section 408 request and coordinate with the Sacramento District Regulatory Division to ensure compliance with the Clean Water Act and Rivers and Harbors Act. If a permit under Section 404 and/or Section 10 is necessary for a proposed alteration, 408 Permission Section and Regulatory Division staff would coordinate the two actions to ensure consistency. The 408 Permission Section would document this coordination process using the Section 408 Validation of Categorical Permission Memorandum. For any alteration requiring a Section 401 certification, the 408 Permission Section would ensure that this certification has been obtained or waived, as provided for by statute, before Section 408 permission is granted.

3.5.3 Cumulative Effects

The geographic analysis area for cumulative effects consists of the USACE federal project areas within the Sacramento District. The major past, present, and reasonably foreseeable future activities that have affected or could potentially affect waters in this geographic analysis area are agriculture, construction, industry, levee and channel operations, maintenance, recreation, restoration, and vehicle traffic. Past construction, agricultural and industrial activities, levee and channel operation and maintenance, recreation, and vehicle traffic have resulted in the loss or degradation of waters throughout the geographic analysis area. These activities continue to impact waters and impacts are expected to continue in the future.

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in issuance of a slightly higher number of Section 408 permissions per year. The general direct and indirect effects of the types of alterations described in the Categorical Permission are discussed in Section 3.5.2.2. These types of alterations are generally covered by Regulatory Nationwide Permits and have minor environmental effects. Additionally, the Preferred Alternative includes conditions that would minimize the potential for adverse impacts to waters. Therefore, implementation of the proposed Categorical Permission would result in a minor contribution to cumulative effects on waters in the geographic analysis area. Given that the potential effects on wetlands that the No Action Alternative could have are the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in a minor contribution to cumulative effects on waters in the geographic analysis area.

3.6 FISH AND WILDLIFE

3.6.1 Affected Environment

On USACE federal project levees within the Sacramento District grasses are generally controlled by a variety of methods and trees are discouraged (Figure 14). USACE federal project channels tend to be less maintained and generally consist of more natural habitat (Figure 15). In some parts of California, large areas, such as bypasses (e.g., the Yolo Bypass) and basins (e.g., the Butte Basin), are federal project channels subject to Section 408 (Figures 16 and 17). These large areas primarily consist of agricultural land, but also contain areas of natural vegetation that may provide habitat for a number of wildlife species. Numerous species of wildlife may use the federal projects within the Sacramento District for a variety of activities, including denning, burrowing, feeding, and as migratory corridors. The majority of the wildlife species that utilize Sacramento District federal projects are common; however, some may be threatened or endangered, these are discussed further in Section 3.8 of this PEA. Other sensitive species, such as bald or golden eagles, may also utilize Sacramento District federal projects for a variety of activities.

A large number of migratory birds, protected under the Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*), are also known to use USACE projects within the Sacramento District for a variety of activities, including nesting. Many of these migratory birds require riparian habitat for both nesting and migration. In many areas, USACE federal projects, particularly within the Central Valley of California, may provide the only remnant riparian habitat for miles. These remnant riparian corridors may serve as migratory corridors for a number of migratory bird species.

USACE federal projects and waters adjacent to them also provide habitat for many fish species, including several threatened and endangered species (see Section 3.8). The Magnuson-Stevens Fishery Conservation and Management Act (MSA) of 1976, as amended (16 U.S.C. 1801 *et seq.*) is the primary law governing marine fisheries management in the U.S. and requires that fishery management councils identify as essential fish habitat (EFH) those areas necessary for fish to perform their basic life functions. The MSA also requires that federal agencies consult with the National Oceanic and Atmospheric Administration (NOAA) Fisheries when their actions may adversely impact EFH. A number of federal project waterways within California provide EFH for Pacific Coast Salmon (79 Federal Register [FR] 75449) and a number of these waterways contain habitat areas of particular concern (HAPC). HAPCs are discrete subsets of EFH that are high priority areas for conservation, management, or research because they are rare, sensitive, stressed by development, or important to ecosystem function (NOAA Fisheries Service 2012). Pacific Coast Salmon have five designated HAPCs: 1) complex channels and floodplain habitats; 2) thermal refugia; 3) spawning habitat; 4) estuaries; and 5) marine and estuarine submerged aquatic vegetation (Pacific Fishery Management Council 2014).

The Fish and Wildlife Coordination Act (FWCA) of 1934, as amended (16 U.S.C. 661 *et seq*.) was enacted for “the purpose of recognizing the vital contribution of our wildlife resources to the Nation” and to “provide that wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs.” The FWCA requires that federal agencies consult with the U.S. Fish and

Wildlife Service (USFWS) and the head of the agency exercising administration over the wildlife resources of the particular state, “whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever” (16 U.S.C. 662).

Figure 14. Photographs of representative Sacramento District federal project levees. The photo on the left, dated January 24, 2012, is of a levee on the Sacramento River, California. The photo on the right, dated August 8, 2006, is of a levee on Putah Creek, California.


Figure 15. Photographs of representative Sacramento District federal channels. The photo on the left, dated May 7, 2009, is of Kays Creek, Utah. The photo on the right, dated June 16, 2010, is of the lower Truckee River, Nevada.

Figure 16. Photographs of the Yolo Bypass, CA, a Sacramento District federal project channel. The photograph on the left is dated October 4, 2005, and the photograph on the right is dated June 15, 2010.

Figure 17. Photographs of flooded Sacramento District federal project channels. The photo on the left, dated February 1, 2017, is of the Yolo Bypass, CA. The photo on the right, dated February 14, 2017, is of the Sacramento Bypass, CA.

3.6.2 Direct and Indirect Effects

3.6.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently used. Each Section 408 request would be individually evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, EA, or EIS). The potential effects on fish and wildlife that proposed alterations processed under the No Action Alternative could have are the same as the effects described for the Preferred Alternative. Currently, the Sacramento District individually evaluates each Section 408 request for potential effects to EFH and, as appropriate, conducts consultation under the MSA with NOAA Fisheries. Additionally, the Sacramento District individually evaluates each Section 408 request for consultation needs under the FWCA and, as appropriate, consults with the USFWS and the appropriate state agency.

3.6.2.2 Preferred Alternative

The alterations described under the Categorical Permission could affect fish and wildlife in a number of ways. Noise from construction activities could startle individuals, causing them to vacate the immediate area, these impacts are expected to be mostly temporary and are described in more detail in Section 3.3.2.2. For each individual proposed alteration small areas may be temporarily cleared for staging of equipment and materials during construction, which could temporarily remove wildlife habitat. However, a condition of the Categorical Permission is that any disturbed area be returned to its pre-construction state following construction; therefore, any staging area impacts to wildlife habitat are expected to be temporary. Under the Preferred Alternative each proposed alteration would be evaluated on a case-by-case basis for potential effects to migratory birds and bald and golden eagles. The footprints of the proposed alterations themselves may permanently affect fish and wildlife habitat. In some cases, such as in restoration projects, the effects may result in a net positive benefit to fish and/or wildlife habitat. In other cases, the proposed alterations may result in the permanent removal or alteration of fish and/or wildlife habitat.

Many of the alterations described under the Categorical Permission could result in effects to EFH; however, for the majority of alterations these effects are not expected to be adverse. Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request for potential effects to EFH. If adverse effects are anticipated, the Sacramento District would consult with NOAA Fisheries pursuant to the MSA. In some cases, potential effects to fish species could actually be beneficial. For example, the installation of fish screens on irrigation pipes can reduce or prevent fish entrainment, resulting in a long-term beneficial effect.

Some of the alterations described under the Categorical Permission could result in permanent modifications to streams or other bodies of water, which could permanently affect (potentially in positive or negative ways, depending on the type of project) habitat for both fish and wildlife species. Under the Preferred Alternative, the Sacramento District would individually evaluate each Section 408 request to determine if the waters

of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose. If applicable, the Sacramento District would consult with the USFWS and the appropriate state agency pursuant to the FWCA.

3.6.3 Cumulative Effects

The geographic analysis area for cumulative effects consists of the USACE federal project areas within the Sacramento District. The major past, present, and reasonably foreseeable future activities that have affected or could potentially affect fish and wildlife in this geographic analysis area are agriculture, construction, fishing (including recreational and commercial), industry, levee and channel operation and maintenance, recreation, restoration, scientific research, and vehicle traffic. As previously discussed, many past activities, including agriculture, urban expansion (i.e., construction), and industry, have reduced the amount and degraded the quality of much of the natural habitat across USACE federal projects within the Sacramento District. Construction and the continued operations and maintenance of project levees and channels has also contributed to habitat loss. Alternatively, past restoration activities have added or improved habitat, generally resulting in a positive impact on fish and wildlife species.

All of the previously mentioned activities have the potential to kill or injure fish and/or wildlife in a variety of ways. Vehicle strikes are a common source of injury or death of individuals, although fishing and recreational hunting are also common sources of injury or death. One aspect of levee and channel maintenance is animal control, particularly the control of rodents, whose burrowing can damage levees. All of the activities also have the potential to alter the behavior of fish and/or wildlife. Loud noises generated by construction or vehicle traffic may alter physiology or force individuals to vacate certain areas. The presence of people may cause nesting birds to vacate their nests. Fishing or hunting activities may reduce or alter prey sources for a number of different species, potentially leading to decreased fitness or causing individuals to vacate an area. Scientific research generally has short-term negative effects on individuals, but may result in long-term positive effects by increasing scientific knowledge about species.

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in the issuance of a slightly higher number of Section 408 permissions per year. The general direct and indirect effects of the types of alterations described in the Categorical Permission are discussed in Section 3.6.2.2. These types of alterations generally have minor and temporary effects (positive and/or negative) on fish and wildlife; therefore, implementation of the proposed Categorical Permission would result in a minor negative contribution to cumulative effects on fish and wildlife in the geographic analysis area. Given that the potential effects on fish and wildlife that the No Action Alternative could have are the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in a minor negative contribution to cumulative effects on fish and wildlife in the geographic analysis area.

3.7 INVASIVE SPECIES

3.7.1 Affected Environment

Invasive species are organisms that are not native to a location and, once introduced, quickly spread and cause harm to the environment, economy, or human health. E.O. 13751 (Safeguarding the Nation from the Impacts of Invasive Species) states that it "is the policy of the United States to prevent the introduction, establishment, and spread of invasive species, as well as to eradicate and control populations of invasive species that are established." Furthermore, E.O. 13112 (Invasive Species) requires that federal agencies identify their actions that may affect the status of invasive species and "not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions." In 2009, USACE issued a policy memorandum establishing a nationwide policy regarding invasive species, with the goal of preventing the "introduction and establishment of invasive species" (USACE 2009).

A large number of invasive species, including plants, animals, and insects, occur across the Sacramento District. Invasive plant and aquatic species tend to be the most common invaders on USACE federal project levees and channels. Invasive species can impact the environment by changing ecosystem processes, decreasing the abundance and diversity of native species, decreasing water quality, changing hydrologic cycles, and even altering nutrient cycling (Pimentel *et al.* 2005, Vilá *et al*. 2011). Invasive species can also have major negative impacts on the U.S. economy by preventing recreation, changing fire regimes, degrading rangeland and timberland, reducing agricultural crop yields, and increasing flood risk (Zavaleta 2000, Pimentel *et al.* 2005). In 2005 Pimentel *et al.* estimated that invasive species can cause losses to the economy adding up to almost $120 billion per year.

In accordance with the Plant Protection Act of 2000 (7 U.S.C. 7701 *et seq*.), the federal government has designated a number of plants as noxious weeds, defined in the Act as "any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, the natural resources of the United States, the public health, or the environment." There are currently 112 species of plants on the federal noxious weed list (USDA 2017), a number of these may occur within the Sacramento District. Additionally, a number of states have designated certain plants as legally noxious, including California with 197 species (CDFA PHPPS 2016), Colorado with 105 species (CDA 2017), Nevada with 47 species (NDA 2016), and Utah with 55 species (UDAF 2017) designated as noxious weeds. Many of the USACE federal projects within the Sacramento District have existing populations of both federal and state designated noxious weeds.

3.7.2 Direct and Indirect Effects

3.7.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently used. Each Section 408 request would be individually evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, EA, or EIS). The potential effects that proposed alterations processed under the No Action Alternative could have are the same as the effects described for the Preferred Alternative, with one exception. Currently, Section 408 permissions do not typically include a standard condition requiring requesters to design projects to minimize the introduction of exotic species and they do not require requesters to ensure that all seed mixes used consist only of native species. Individual requesters may include measures similar to these in their proposed project designs, but there is not currently a standard condition regarding invasive species.

3.7.2.2 Preferred Alternative

All of the types of alterations described under the proposed Categorical Permission have the potential to affect invasive species in some way. Many of the types of alterations may have the potential to introduce new invasive species to an area or exacerbate existing invasive populations. Noxious weed seeds may be introduced to an area through unwashed equipment or seed mixes that have not been certified as weed free. Many invasive plant species respond positively to disturbance, particularly if a population is already established in an area that is disturbed by construction (Larson 2003). Construction of alterations often results in ground disturbance, which could lead to new invasions of construction sites, or exacerbation of existing noxious weed populations. Both aquatic and terrestrial non-plant invasive species may also be introduced to a site through construction equipment, including barges, or worker vehicles.

Some of the types of alterations, such as restoration projects, may reduce invasive species populations. Many restoration projects involve invasive species removal components, usually using herbicide and/or manual removal methods. These types of projects could result in the reduction or complete eradication of existing invasive species populations.

Under the Preferred Alternative, all alterations must be designed to minimize the introduction of exotic species (both plant and animal) and any seed mixes used in site restoration must consist only of native species. These measures would help minimize the introduction of new populations of invasive species to proposed construction areas.

3.7.3 Cumulative Effects

The geographic analysis area for cumulative effects consists of the USACE federal project areas within the Sacramento District. The major past, present, and reasonably foreseeable future activities that have affected or could potentially affect invasive

species in this geographic analysis area are agriculture, construction, fishing (including recreational and commercial), industry, levee and channel operation and maintenance, recreation, restoration, scientific research, and vehicle traffic. Human activities have introduced the majority of invasive species infestations throughout the United States, and the Sacramento District is no exception. All of the aforementioned activities have contributed in some manner to current invasive species infestations on USACE projects within the Sacramento District and are expected to continue to contribute to infestations. All of the activities have the potential to introduce new invasive species, spread invasive species, and exacerbate existing infestations. Although restoration activities have the potential to contribute to invasive species infestations, they also have the potential to diminish or fully eradicate local infestations of invasive species.

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in the issuance of a slightly higher number of Section 408 permissions per year. The general direct and indirect effects of the types of alterations described in the Categorical Permission are discussed in Section 3.7.2.2. These types of alterations generally have minor effects on invasive species. Additionally, the Preferred Alternative includes a condition that specifies that all alterations must be designed to minimize the introduction of exotic species (both plant and animal) and any seed mixes used in site restoration must consist only of native species. Therefore, implementation of the proposed Categorical Permission would result in a minor negative contribution to cumulative effects on invasive species in the geographic analysis area. Given that the potential effects on invasive species that the No Action Alternative could have are the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in a minor negative contribution to cumulative effects on invasive species in the geographic analysis area.

3.8 THREATENED AND ENDANGERED SPECIES

3.8.1 Affected Environment

Section 7 of the federal Endangered Species Act (ESA) of 1973, as amended, (16 U.S.C. 1531 *et seq*.) requires federal agencies to consult with the USFWS and/or NOAA Fisheries, as appropriate, when their actions may affect threatened or endangered species or their designated critical habitat. Designated critical habitat is defined under the ESA as specific areas that have physical or biological features essential to the conservation of the species and which may require special management considerations or protection.

The Sacramento District spans multiple states and USACE Sacramento District federal projects are located in seven major “Level III” ecoregions, or areas where ecosystems are generally similar (Figure 18). There are numerous species, both aquatic and terrestrial, listed as threatened or endangered under the ESA that may occur in the vicinity of USACE federal projects within the Sacramento District, both in California and in other states (Table 3). There are a total of three species of amphibians, five species of birds, three species of crustaceans, eleven species, evolutionarily significant units (ESU), or distinct population segments (DPS) of fish, one species of insect, nine species of mammals, seventeen species of plants, and three species of reptiles that

may occur in the vicinity of a USACE federal project (Appendix B). Designated and proposed critical habitat for numerous species may also occur in the vicinity of USACE federal projects within the Sacramento District. Please see Appendix B for brief descriptions of each species.

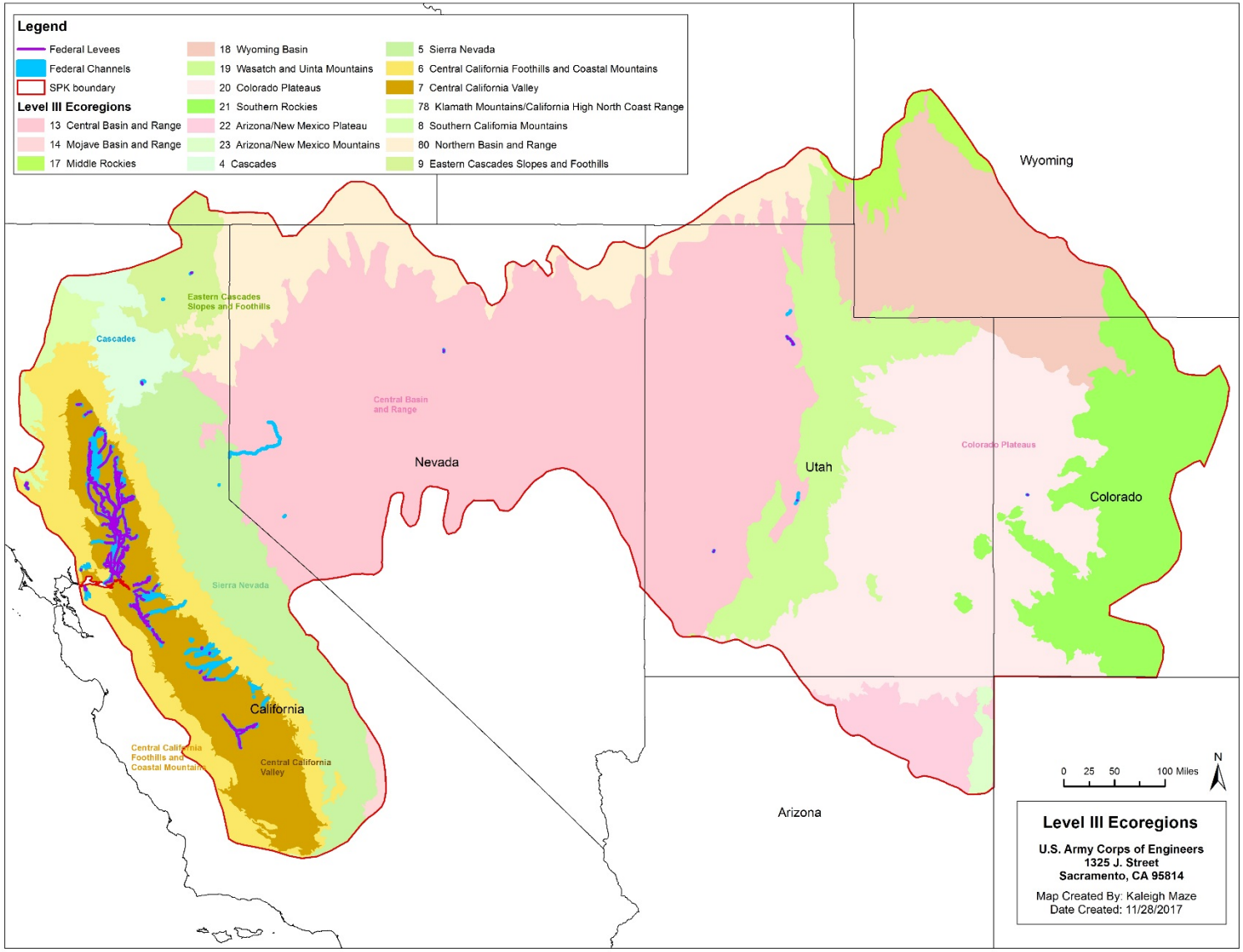

Figure 18. Map showing the Level III Ecoregions that contain a Sacramento District USACE federal project.

Table 3. List of aquatic and terrestrial species listed (or proposed) as threatened or endangered under the federal Endangered Species Act that may be present in the vicinity of each of the Sacramento District USACE federal projects. The list is organized by Level III Ecoregion, with additional classifications as necessary.

Level III Ecoregion	**Aquatic Species**	**Terrestrial Species**
Cascades	None	*Orcuttia tenuis* (slender Orcutt grass), *Rana sierrae* (Sierra Nevada yellow-legged frog)
Central Basin and Range – Nevada	*Chasmistes cujus* (Cui-ui), *Oncorhynchus clarkia henshawi* (Lahontan cutthroat trout)	*Coccyzus americanus occidentalis* (western DPS yellow-billed cuckoo),
Central Basin and Range – Moist Wasatch Front Footslopes	None	*Coccyzus americanus occidentalis* (western DPS yellow-billed cuckoo), *Spiranthes diluvialis* (Ute ladies'-tresses)
Central Basin and Range – Sagebrush Basins and Slopes	None	*Coccyzus americanus occidentalis* (western DPS yellow-billed cuckoo), *Cynomys parvidens* (Utah prairie dog), *Gymnogyps californianus* (California condor)
Central California Foothills and Coastal Mountains – Clear Lake Hills and Valleys	None	*Coccyzus americanus occidentalis* (western DPS yellow-billed cuckoo), *Eryngium constancei* (Loch Lomond coyote thistle), *Lasthenia burkei* (Burke's goldfields), *Navarretia leucocephala* ssp. *plieantha* (many-flowered navarretia), *Navarretia leucocephala* ssp. *pauciflora* (few-flowered navarretia), *Orcuttia tenuis* (slender Orcutt grass), *Sedella leiocarpa* (Lake County stonecrop)

Level III Ecoregion	Aquatic Species	Terrestrial Species
Central California Foothills and Coastal Mountains	*Acipenser medirostris* (southern DPS of North American green sturgeon), *Hypomesus transpacificus* (delta smelt), *Oncorhynchus mykiss* (Central Valley DPS of steelhead), *Oncorhynchus tshawytscha* (Chinook salmon, Sacramento River winter-run ESU and Central Valley spring-run ESU)	*Ambystoma californiense* (California tiger salamander), *Branchinecta lynchi* (vernal pool fairy shrimp), *Chloropyron molle* ssp. *molle* (soft salty bird's beak), *Cirsium hydrophilum* var. *hydrophilum* (Suisun thistle), Desmocerus *californicus dimorphus* (valley elderberry longhorn beetle), *Elaphrus viridis* (delta green ground beetle), *Lasthenia conjugens* (Contra Costa goldfields), *Lepidurus packardi* (vernal pool tadpole shrimp), *Masticophis lateralis euryxanthus* (Alameda whipsnake), *Oenothera deltoides* ssp. *howellii* (Antioch Dunes evening-primrose), *Rallus longirostris obsoletus* (California clapper rail), *Rana draytonii* (California red-legged frog), *Reithrodontomys raviventris* (salt-marsh harvest mouse), *Sidalcea keckii* (Keck's checkermallow), *Thamnophis gigas* (giant garter snake)
Central California Valley – Sacramento Valley	*Acipenser medirostris* (southern DPS of North American green sturgeon), *Hypomesus transpacificus* (delta smelt), *Oncorhynchus mykiss* (Central Valley DPS of steelhead), *Oncorhynchus tshawytscha* (Chinook salmon, Sacramento River winter-run ESU and Central Valley spring-run ESU)	*Ambystoma californiense* (California tiger salamander), *Branchinecta conservatio* (Conservancy fairy shrimp), *Branchinecta lynchi* (vernal pool fairy shrimp), *Chloropyron palmatum* (palmate-bracted salty bird's-beak), *Coccyzus americanus occidentalis* (western DPS yellow-billed cuckoo), *Desmocerus californicus dimorphus* (valley elderberry longhorn beetle), *Euphorbia hooveri* (Hoover's spurge), *Lepidurus packardi* (vernal pool tadpole shrimp), *Limnanthes floccosa* ssp. *californica* (Butte County meadowfoam), *Pseudobahia bahiifolia* (Hartweg's golden sunburst), *Thamnophis gigas* (giant garter snake), *Tuctoria greenei* (Greene's tuctoria), *Vireo bellii pusillus* (least Bell's vireo)

Level III Ecoregion	Aquatic Species	Terrestrial Species
Central California Valley – San Joaquin Valley	*Acipenser medirostris* (southern DPS of North American green sturgeon), *Oncorhynchus mykiss* (Central Valley DPS of steelhead)	*Ambystoma californiense* (California tiger salamander), *Branchinecta conservatio* (Conservancy fairy shrimp), *Branchinecta lynchi* (vernal pool fairy shrimp), *Castilleja campestris* ssp. *succulenta* (succulent owl's-clover), *Coccyzus americanus occidentalis* (western yellow-billed cuckoo), *Desmocerus californicus dimorphus* (valley elderberry longhorn beetle), *Dipodomys nitratoides exilis* (Fresno kangaroo rat), *Dipodomys nitratoides nitratoides* (Tipton kangaroo rat), *Gambelia sila* (blunt-nosed leopard lizard), *Lepidurus packardi* (vernal pool tadpole shrimp), *Neostapfia colusana* (Colusa grass), *Neotoma fuscipes riparia* (riparian woodrat), *Orcuttia inaequalis* (San Joaquin Valley Orcutt grass), *Pseudobahia bahiifolia* (Hartweg's golden sunburst), *Sylvilagus bachmani riparius* (riparian brush rabbit), *Thamnophis gigas* (giant garter snake), *Vireo bellii pusillus* (least Bell's vireo), *Vulpes macrotis mutica* (San Joaquin kit fox),
Colorado Plateaus	*Gila cypha* (humpback chub), *Gila elegans* (bonytail chub), *Ptychocheilus lucius* (Colorado pikeminnow), *Xyrauchen texanus* (razorback sucker)	*Coccyzus americanus occidentalis* (western yellow-billed cuckoo), *Strix occidentalis lucida* (Mexican spotted owl)
Eastern Cascades Slopes and Foothills	None	*Canis lupus* (gray wolf), *Orcuttia tenuis* (slender Orcutt grass), *Tuctoria greenei* (Greene's tuctoria)
Sierra Nevada – Truckee River	*Chasmistes cujus* (cui-ui), *Oncorhynchus clarkia henshawi* (Lahontan cutthroat trout)	*Gulo gulo luscus* (North American wolverine), *Rana sierrae* (Sierra Nevada yellow-legged frog)

3.8.2 Direct and Indirect Effects

3.8.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently used. Each Section 408 request would be individually evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, EA, or EIS). The potential effects on threatened and endangered species that proposed alterations processed under the No Action Alternative could have are the same as the effects described for the Preferred Alternative. Currently, the Sacramento District individually evaluates each Section 408 request for potential effects to threatened and endangered species listed under the federal ESA and, as appropriate, conducts consultation under Section 7 of the ESA with either the USFWS and/or NOAA Fisheries.

3.8.2.2 Preferred Alternative

The Preferred Alternative is for the Sacramento District to implement a Categorical Permission that would streamline the review process of Section 408 requests for minor alterations to USACE federal projects. As the implementation of a streamlined review process would not involve any on-the-ground work, there are no anticipated effects to threatened and endangered species resulting from the decision at hand.

However, the Categorical Permission would cover a variety of actions that are similar in nature and effect, see Section 2.3 for a list of all actions that would be encompassed by the Categorical Permission. Many of these individual actions could affect threatened or endangered species. Due to the large geographical area covered by the Categorical Permission, as well as the large number of federally listed species that could occur in this area, it is not practical or appropriate to discuss the potential project-specific impacts of each of these actions on threatened and endangered species. Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request on a case-by-case basis for potential effects to threatened and endangered species (and their designated critical habitat) listed under the federal ESA and, as appropriate, and consult under Section 7 of the ESA with the USFWS and/or NOAA Fisheries.

3.8.3 Cumulative Effects

The geographic analysis area for cumulative effects consists of the USACE federal project areas within the Sacramento District. The major past, present, and reasonably foreseeable future activities that have affected or could potentially affect threatened and endangered species in this geographic analysis area are agriculture, construction, fishing (including recreational and commercial), industry, levee and channel operation and maintenance, recreation, restoration, scientific research, and vehicle traffic. Most of these activities have negatively affected, and are expected to continue to affect, threatened and endangered species, either through habitat loss or direct mortality (see Section 3.6.3).

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in the issuance of a slightly higher number of Section 408 permissions per year. These types of alterations generally are expected to have minor effects on threatened and endangered species, additionally, under the Preferred Alternative, the Sacramento District would individually evaluate each proposed alteration and consult under Section 7 as appropriate. Therefore, implementation of the proposed Categorical Permission would result in a minor contribution to cumulative effects on threatened and endangered species and designated critical habitat in the geographic analysis area. Given that the potential effects on threatened and endangered species that the No Action Alternative could have are the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in a minor contribution to cumulative effects on threatened and endangered species in the geographic analysis area.

3.9 VEGETATION

3.9.1 Affected Environment

USACE federal project levees are operated and maintained by local maintaining agencies, which are tasked with maintaining a certain standard for vegetation on the levees. In general, levees are vegetated with largely nonnative grasses and forbs that are regularly mowed or otherwise controlled to allow for inspection of the levee. Trees and large shrubs are discouraged on levees, because of the threat the root systems pose to the structure of the levee, but do occur. Federal project floodplains within the Sacramento District, such as the Yolo Bypass in California, are often used for agricultural purposes, including both annual row crops and orchards. The vegetation growing on and alongside the levees, and within the channels and floodplains, is generally characteristic of the ecoregions that the project is located within. This vegetation is often, but not always, riparian, with common tree species across ecoregions including willow (*Salix* sp.) and cottonwood (*Populus* sp.).

As previously mentioned, USACE Sacramento District federal projects are located in seven major Level III ecoregions, or areas where ecosystems are generally similar (Figure 18). Using a framework originally published by Omernik (1987), the USEPA, in collaboration with other countries and federal and state agencies, has mapped different hierarchical levels of ecoregions in North America. Level I ecoregions are the broadest, with only ten in the continental United States, and Level IV are the finest-scale, with 967 in the continental United States (Omernik and Griffith 2014). The Sacramento District covers a large geographical area with a wide variety of different ecosystems and microhabitats present; for example, Sacramento District federal projects are located within 29 Level IV ecoregions. Therefore, it is most feasible and meaningful to set the geographical scope for analysis of vegetation at the Level III ecoregion.

The Cascades ecoregion is a mountainous region that extends from Washington, through Oregon, and into northern California and is characterized by a moist, temperate climate that supports a productive coniferous forest. In northern California, Douglas fir (*Pseudotsuga menziesii*), incense cedar (*Calocedrus decurrens*), white fir (*Abies concolor*), and Shasta red fir (*A. magnifica* var. *shastensis*) are common, along with

numerous species more common to the Sierra Nevada Mountains. At mid-elevations, ponderosa (*Pinus ponderosa*) and Jeffrey (*P. jeffreyi*) pines are common. Higher elevations are characterized by subalpine meadows, rocky alpine zones, and whitebark pine (*P. albicaulis*) and mountain hemlock (*Tsuga mertensiana*).

The Central Basin and Range ecoregion is composed of northerly trending fault-block ranges, interspaced by drier basins. At lower elevations, the main vegetation types are saltbush (*Atriplex* sp.) greasewood (*Sarcobatus* sp.) and Great Basin sagebrush (*Artemisia* sp.), with localized areas of tule (*Schoenoplectus acutus*) marsh. As elevation increases, tree cover also increases, with juniper (*Juniperus* sp.) and pinyon pine (*Pinus* sp.) woodland and scattered western spruce (*Picea* sp.) and fir (*Abies* sp.) forests occurring at higher elevations.

The Central California Foothills and Coastal Mountains ecoregion is characterized by a Mediterranean climate of hot, dry summers and cool, moist winters. Most of the region consists of open low mountains and foothills, with occasional irregular plains and narrow valleys. The vegetation cover is composed mostly of chaparral and oak (*Quercus* sp.) woodlands, with grasslands occurring at low elevations and scattered patches of pine (*Pinus* sp.) at higher elevations. Some of the common tree species include Coulter pine (*P. coulteri*), grey pine (*P. sabiniana*), coast live oak (*Q. agrifolia*), blue oak (*Q. douglasii*), and black oak (*Q. kelloggii*).

The Central California Valley is flat, intensively farmed and also has a Mediterranean climate, with hot, dry summers and mild winters. This ecoregion once contained diverse habitats, including extensive prairies, oak savannas, desert grasslands, riparian woodlands, freshwater marshes, and vernal pools. However, the area is now extensively farmed, irrigated, and populated, and only scattered patches of native habitat remain. Some of the extant native habitats, particularly the vernal pool habitats, support a variety of rare plants.

The Colorado Plateaus are characterized by canyons, mesas, plateaus, and mountains; rugged tableland topography is typical. Large low-lying areas, with saltbush and greasewood, are also common. Pinyon-juniper and Gambel oak (*Q. gambelii*) woodlands are widespread in the region.

The Eastern Cascades Slopes and Foothills is in the rain shadow of the Cascade Range and has a dry, continental climate with greater temperature extremes than the ecoregions to the west. This ecoregion contains numerous volcanic cones, plateaus, and buttes, as well as lake basins and river valleys. At middle elevations, open forests of ponderosa pine, western juniper (*Juniperus occidentalis*), and occasionally Jeffrey pine are abundant. Lodgepole pine (*P. contorta*) and western white pine (*P. monticola*) are common at higher elevations.

The Sierra Nevada ecoregion is a mountainous, deeply dissected, and westerly tilting fault block that is largely composed of lithologically distinct granitic rocks. On the western side of the ecoregion the vegetation is composed of mostly ponderosa pine and Douglas fir at lower elevations ranging to fir and other conifers at higher elevations. The Sierra Nevada cast a rain shadow, therefore the eastern side is drier, with vegetation

ranging from Jeffrey pine and Sierra juniper (*Juniperus* sp.) at lower elevations, to fir and whitebark pine at higher elevations.

3.9.2 Direct and Indirect Effects

3.9.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently used. Each Section 408 request would be individually evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, EA, or EIS). The potential effects on vegetation that proposed alterations processed under the No Action Alternative could have are the same as the effects described for the Preferred Alternative.

3.9.2.2 Preferred Alternative

All of the types of alterations described under the Categorical Permission could have direct effects on vegetation if they occur in vegetated areas. Many of the alterations involve excavation, which would likely kill any vegetation growing in the excavated area. Some of the alterations (e.g., borrow areas) specifically call for the clearing and grubbing of all vegetation in the proposed excavation site. One or more small areas may be temporarily cleared for staging of equipment and materials during construction. However, a condition of the proposed Categorical Permission is that the disturbed area(s) used for staging must be returned to the pre-construction state following construction. As previously discussed, any seed mixes used in site restoration must consist solely of native plant species. Therefore, in staging areas there would be temporary negative effects on vegetation, but the requirement to replant (if the staging area was vegetated pre-construction) with native vegetation would offset those effects.

Many of the types of alterations may also indirectly affect vegetation through soil compaction. Soil compaction is common when heavy equipment is used and can persist for many years, this compaction can alter soil structure and hydrology. This can inhibit seed germination and seedling growth and lead to physiological effects on mature plants, including reduction in mineral absorption, reduction in photosynthesis, and growth hormone imbalances, among other effects (Kozlowski 1999). The intensity of effects of compaction on vegetation is largely dependent on site specific soil texture, the soil water regime, and degree of compaction (Lipiec and Stępniewski 1995, Gomez *et al*. 2002).

Although vegetation may be removed during construction, the proposed Categorical Permission requires that proposed alterations be designed to minimize the amount of woody vegetation removal. Woody vegetation, including both shrubs and trees, is often used by birds for nesting and can shade nearby waterways, lowering water temperatures and enhancing habitat for fish. As discussed in the Affected Environment (Section 3.9.1), woody vegetation is discouraged on USACE levees, but is common in floodways and may exist on the slopes of less maintained levees across the Sacramento District. The removal of woody vegetation from these habitats would

directly kill vegetation and could indirectly affect fish and wildlife species as discussed in Section 3.6.2.

Construction equipment and vehicles driving around and to and from the construction site could directly affect vegetation by crushing plants, compacting the soil, and increasing dust levels. One of the conditions of the proposed Categorical Permission is that access to the proposed alteration site must occur in previously disturbed areas, such as existing roads, access ramps, driveways, or the levee crown. This condition would reduce the potential for vehicle effects on vegetation by restricting access routes to previously disturbed routes, which are generally un-vegetated.

Some of the proposed alterations, such as environmental restoration, may have beneficial effects on vegetation. Many environmental restoration alterations contain a native vegetation planting component, usually of grasses, forbs, and shrubs. In some cases, small trees may even be planted as a component of a proposed alteration.

3.9.3 Cumulative Effects

The geographic analysis area for cumulative effects consists of the USACE federal project areas within the Sacramento District. The major past, present, and reasonably foreseeable future activities that have affected or could potentially affect vegetation in this geographic analysis area are agriculture, construction, industry, levee and channel operation and maintenance, recreation, restoration, scientific research, and vehicle traffic.

As previously discussed, agriculture and construction activities have had major impacts on native habitat throughout the Sacramento District, particularly in California. These types of activities have resulted in the loss of much of the native vegetation in the geographic analysis area. The impacts of these activities on vegetation are often direct, such as the direct removal of vegetation during a construction project or the conversion of native vegetation to agriculture. However, often the impacts to vegetation are indirect, through soil compaction, pollution, etc. Within the geographic analysis area, levee and channel maintenance has a large impact on vegetation. Local maintaining agencies are tasked with maintaining the USACE federal projects to standards specified in the O&M manual for each specific USACE project. These standards generally include maintaining sod cover, mowing vegetation, and preventing trees and brush from persisting on the levees. Although most of the activities result in negative effects to vegetation, restoration generally results in long-term positive effects as most restoration activities involve native vegetation plantings.

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in the issuance of a slightly higher number of Section 408 permissions per year. The general direct and indirect effects of the types of alterations described in the Categorical Permission are discussed in Section 3.9.2.2. These types of alterations generally have minor and temporary effects on vegetation, additionally, the Preferred Alternative incorporates a number of conditions to minimize effects to vegetation (see Section 2.3.1, conditions ENG-16, ENV-1, ENV-3, and ENV-5). Therefore, implementation of the proposed Categorical Permission would result in a

minor contribution to cumulative effects on vegetation in the geographic analysis area. Given that the potential effects on vegetation that the No Action Alternative could have are the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in a minor contribution to cumulative effects on vegetation in the geographic analysis area.

3.10 AESTHETICS

3.10.1 Affected Environment

When considering the aesthetic value of an area, it is important to consider the visual character and quality of that area, as well as the viewer response. Visual character is defined as the description of the visible attributes of a scene or object. Artistic terms, such as form, line, color, and texture, are typically used to describe visual character. Visual character can be influenced by many different resources, including atmospheric, geologic, hydrologic, botanical, wildlife, recreation, and urban features. Visual quality is defined as what viewers like and dislike about visual resources that compose the visual character of a particular scene. Different viewers may evaluate specific visual resources differently based on their unique, individual interests in natural harmony, cultural order, and project coherence (FHWA 2015). Additionally, the viewer's point of observation and viewing distance play an important role in how individuals evaluate visual resources.

USACE federal projects within the Sacramento District are located in a wide variety of settings and landscapes where the visual character and quality of projects is highly varied and site specific. Many projects are located in agricultural settings, with foreground views of waterways and agricultural fields and background views of local mountain ranges, including the Sierra Nevada and the Coastal Range in California. Urban and suburban settings are also common within the Sacramento District; the views in these areas tend to be limited by buildings and vegetation. The primary viewer groups in the Sacramento District are persons living or conducting business near the numerous USACE federal projects, travelers using the interstates, highways, and smaller local roads (including those on levee crowns), and recreational users of the federal projects.

Some areas within the Sacramento District may be particularly sensitive in terms of aesthetics. For example, many historic properties are located within the Sacramento District and often have unique or notable aesthetic values. Many recreation areas, often valued by the public for their visual qualities, are also located within the Sacramento District. National Scenic Byways, a program established by the Intermodal Surface Transportation Efficiency Act of 1991 (Pub. L. 102-240), are often valued specifically for their visual quality. In order to be designated under the National Scenic Byway program, a road must contain at least one of six intrinsic qualities: archaeological quality, cultural quality, historic quality, natural quality, recreational quality, or scenic quality (NPS 2002). There are two National Scenic Byways adjacent to or intersecting USACE federal projects within the Sacramento District: the Pyramid Lake Scenic Byway in Nevada and the Volcanic Legacy Scenic Byway in California.

3.10.2 Direct and Indirect Effects

3.10.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently used. Each Section 408 request would be individually evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, EA, or EIS). The potential effects on aesthetics that proposed alterations processed under the No Action Alternative could have are the same as the effects described for the Preferred Alternative.

3.10.2.2 Preferred Alternative

The types of alterations covered by the proposed Categorical Permission have the potential to affect aesthetics in a variety of ways. Construction of most of the types of alterations covered by the proposed Categorical Permission could temporarily adversely affect visual quality by degrading visual resources or obstructing or altering views. Construction equipment in particular may obstruct or alter views. Additionally, many of the alterations could have long-term adverse effects on visual resources. Although adverse effects are possible, alterations could result in long-term beneficial effects on visual quality by either enhancing visual resources or by creating better views of those resources. Effects of proposed alterations on aesthetics are expected to be minor. Potential aesthetic effects to historic properties would be evaluated by USACE staff meeting the Secretary of the Interior's Qualifications, and consulted on with the appropriate State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) on a case-by-case basis (see Section 3.11.3). The types of alterations covered by the proposed Categorical Permission are not expected to affect the intrinsic values of the designated National Scenic Byways adjacent to or intersecting USACE federal projects within the Sacramento District.

3.10.3 Cumulative Effects

The geographic analysis area for cumulative effects consists of the viewsheds surrounding USACE federal project areas within the Sacramento District. The major past, present, and reasonably foreseeable future activities that have affected or could potentially affect aesthetics in this geographic analysis area are agriculture, construction, industry, levee and channel operation and maintenance, and restoration. Some of these activities have resulted in improved aesthetics and some have resulted in decreased aesthetic quality.

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in the issuance of a slightly higher number of Section 408 permissions per year. The general direct and indirect effects of the types of alterations described in the Categorical Permission are discussed in Section 3.10.2.2. As aesthetics are a subjective resource, with quality depending on the viewer, the effects of proposed alterations can be difficult to quantify; however, these types of alterations generally have minor effects on aesthetics. Therefore, implementation of the

proposed Categorical Permission would result in a minor contribution to cumulative effects on aesthetics in the geographic analysis area. Given that the potential effects on aesthetics that the No Action Alternative could have are the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in a minor contribution to cumulative effects on aesthetics in the geographic analysis area.

3.11 CULTURAL RESOURCES

3.11.1 Affected Environment

Issuing a Section 408 permission is a federal action and is thus subject to compliance with Section 106 the National Historic Preservation Act (NHPA) of 1966, as amended (Section 106; 54 U.S.C. 306108). Section 408 permissions are also subject to other laws and executive orders pertaining to cultural resources, including the American Indian Religious Freedom Act, the Archaeological and Historic Preservation Act, the Archaeological Resources Protection Act, the Native American Graves and Repatriation Act, E.O. 13007 (Indian Sacred Sites), and E.O. 13175 (Consultation with Indian Tribes, Alaska Natives, and Native Hawaiians). These laws and Executive Orders are described in more detail in Chapter 4, Regulatory Setting. Cultural resources can be defined as a site, structure, landscape, object or natural feature of significance to a group of people traditionally associated with it. The NHPA defines a historic property as "any prehistoric or historic district, site, building, structure, or object included on, or eligible for inclusion in, the National Register, including artifacts, records, and material remains relating to the district, site, building, structure, or object" (54 U.S.C. 300308). When a federal action has the potential to cause effects to historic properties, Section 106 of the NHPA requires that the agency consult with the appropriate SHPO or THPO as well as any Indian tribes that might attach religious and cultural significance to historic properties in the area of potential effects (36 CFR 800).

The cultural setting across the entire Sacramento District comprises a vast area with numerous Native American groups and a multitude of historical periods of significance. Research has determined that 41 federally recognized tribes have interests in lands within the Sacramento District civil works boundary.

3.11.2 Direct and Indirect Effects

3.11.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently used. Each Section 408 request would be individually evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, EA, or EIS). The potential effects on cultural resources that proposed alterations processed under the No Action Alternative could have are the same as the effects described for the Preferred Alternative. Currently, Secretary of the Interior-qualified cultural resources staff (qualified staff) within the Sacramento District individually evaluate each Section 408 request for the potential to affect cultural resources and, when there is the potential to affect, conduct consultation with the appropriate SHPO or THPO pursuant to Section

106 of the NHPA. When a proposed alteration has the potential to affect cultural resources, potentially interested Native American tribes identified through the Native American Heritage Commission would also be included in the consultation process.

3.11.2.2 Preferred Alternative

The Preferred Alternative is for the Sacramento District to implement a Categorical Permission that would streamline the review process of Section 408 requests for minor alterations to USACE projects. As the implementation of a simplified review process would not involve any on-the-ground work, the decision at hand does not have the potential to affect historic properties. However, many alterations covered by the Categorical Permission have the potential to affect cultural resources. Due to the large geographical area proposed to be covered by the Categorical Permission, it is not practical or appropriate to discuss the potential project-specific effects of each of these actions on cultural resources. Under the Preferred Alternative, Sacramento District qualified staff would continue to individually evaluate each Section 408 request on a case-by-case basis for the potential to affect cultural resources and, when there is the potential to affect, conduct consultation with the appropriate SHPO or THPO pursuant to Section 106 of the NHPA. In addition, when a proposed alteration has the potential to affect cultural resources, the Sacramento District would identify and consult with all potentially interested federally recognized Native American tribes.

3.11.3 Cumulative Effects

The geographic analysis area for cumulative effects consists of the USACE federal project areas within the Sacramento District. The major past, present, and reasonably foreseeable future activities that have affected, or could potentially affect, cultural resources in this geographic analysis area are agriculture, construction, fishing (including recreational and commercial), industry, levee and channel operation and maintenance, recreation, restoration, scientific research, and vehicle traffic.

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in the issuance of a slightly higher number of Section 408 permissions per year. The general direct and indirect effects of the types of alterations described in the Categorical Permission are discussed in Section 3.11.2.2. These types of alterations are expected to have minor effects on cultural resources. Therefore, implementation of the proposed Categorical Permission would result in a minor contribution to cumulative effects on cultural resources in the geographic analysis area. Given that the potential effects on cultural resources that the No Action Alternative could have are the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in a minor contribution to cumulative effects on resources in the geographic analysis area.

3.12 FARMLAND AND AGRICULTURE

3.12.1 Affected Environment

Although USACE federal levees are generally not considered to be farmland, some of the federal floodways within the Sacramento District contain farmland and are actively

used for agriculture. In California, orchards are often planted in the floodway between levees. Some of the floodways in California, such as the Yuba River Floodway or the Butte Basin, are thousands of acres in size, much of which is farmland. Farmland located within USACE federal projects in the Sacramento District may be used in a variety of ways, including hay production, row crops, orchards, rice fields, or grazing.

The Farmland Protection Policy Act (FPPA) of 1984 (7 U.S.C. 4201 *et seq.*) was instituted in order to "minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government, and private programs and policies to protect farmland." However, federal permitting for activities on private or non-federal lands is not considered to be a federal program under the FPPA (7 CFR 658.2). The vast majority of Section 408 requests are for activities on private or non-federal land, excluding them from review under the FPPA. USACE would review any Section 408 requests for alterations to federal lands using the FPPA regulations (7 CFR 658).

3.12.2 Direct and Indirect Effects

3.12.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently used. Each Section 408 request would be individually evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, EA, or EIS). The potential effects on farmland and agriculture that proposed alterations processed under the No Action Alternative could have are the same as the effects described for the Preferred Alternative.

3.12.2.2 Preferred Alternative

The Preferred Alternative is for the Sacramento District to implement a Categorical Permission that would streamline the review process of Section 408 requests for minor alterations to USACE federal projects. As the implementation of a simplified review process would not involve any on-the-ground work, the programmatic decision at hand does not have the potential to affect farmland or agriculture. However, the Categorical Permission would be for a variety of actions that are similar in nature and effect, see Section 2.3 for a list of all actions that would be encompassed by the Categorical Permission. Some of these individual actions would have the potential to affect farmland and/or agriculture.

Some of the alterations described under the proposed Categorical Permission, particularly the construction of buildings, borrow sites, environmental restoration projects, and seepage and stability berms, could result in the conversion of private farmland to nonagricultural uses. However, some of the alterations described under the proposed Categorical Permission could positively affect farmland and agriculture. For example, alterations such as ditches and canals, wells, water supply pump stations, and

utility pipes could all directly enhance farm irrigation systems, resulting in a positive effect to agriculture. One of the alterations described under the Preferred Alternative is specifically for agriculture, covering a variety of activities such as grazing, orchard installation, planting of row crops, irrigation line installation, etc. This alteration would directly affect agriculture and farmland by increasing the square footage of farmland in a given area, improving irrigation systems, and improving existing farmland.

3.12.3 Cumulative Effects

The geographic analysis area for cumulative effects consists of the USACE federal project areas within the Sacramento District. The major past, present, and reasonably foreseeable future activities that have affected, or could potentially affect, farmland and agriculture in this geographic analysis area are agriculture, construction, industry, levee and channel operation and maintenance, and restoration. These activities have both increased and decreased the amount of farmland in the geographic analysis area in the past, and are expected to continue to do so into the future.

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in the issuance of a slightly higher number of Section 408 permissions per year. The general direct and indirect effects of the types of alterations described in the Categorical Permission are discussed in Section 3.12.2.2. These types of alterations generally have minor effects on farmland and agriculture. Therefore, implementation of the proposed Categorical Permission would result in a minor contribution to cumulative effects on farmland and agriculture in the geographic analysis area. Given that the potential effects on farmland and agriculture that the No Action Alternative could have are the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in a minor contribution to cumulative effects on resources in the geographic analysis area.

3.13 RECREATION

3.13.1 Affected Environment

The land contained within USACE federal projects in the Sacramento District is often used by the public for recreation. Waterways are popular with boaters and swimmers and many levees have pedestrian and bicycle trails constructed on the crown. In urban or suburban areas levees often have public parks, sports fields, or golf courses abutting them. Some project floodplains even have public recreation lands located within them; for example, the Fremont Weir State Wildlife Area located within the Yolo Bypass in California and the San Joaquin National Wildlife Refuge located on the San Joaquin River in California. These recreational areas are used in varying degrees by the public, ranging from heavy usage to very light usage, depending on the area. Recreation areas located on or within USACE federal projects may be managed by local, state, or federal agencies.

The Lower American River in California is designated as a recreational Wild and Scenic River and is one of the most heavily used recreation rivers in California. Only the 23 miles from the confluence with the Sacramento River to the Nimbus Dam is designated as a wild and scenic river. The Lower American River is the only wild and scenic river

that is also a USACE federal project located within the Sacramento District; the State of California is the administering agency for this river.

The Wild and Scenic Rivers Act of 1968 was enacted to protect certain rivers “which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values” (16 U.S.C. 1273 *et seq*.). Rivers are classified as wild, scenic, or recreational and are administered by either a federal or state agency (Interagency Wild and Scenic Rivers Coordinating Council 1998). Although the Act neither prohibits development nor gives the federal government control over private property, it does prohibit federal support for actions that would harm the river's free-flowing condition, water quality, or outstanding resource values. Section 7 of the Wild and Scenic Rivers Act directs federal agencies to protect the free-flowing condition and other functions of designated rivers and congressionally authorized study rivers. Specifically, the Act prohibits federal agencies from assisting in the construction of any water resources project that would have a direct and adverse effect on a designated river or congressionally authorized study river. Water resources projects include dams, water diversion projects, fisheries habitat and watershed restoration/enhancement projects, bridges and other roadway construction/reconstruction projects, bank stabilization projects, channelization projects, levee construction, recreation facilities, and activities requiring a Section 404 permit from USACE. Federal assistance includes, but is not limited to, a license, permit or other authorization granted by USACE (Interagency Wild and Scenic Rivers Coordinating Council 2004).

If a project is proposed in the bed or banks of a designated river or congressionally authorized study river and is proposed by a federal agency or requires some type of federal assistance, a determination regarding effects is required under Section 7 of the Wild and Scenic Rivers Act. Additionally, if a federally proposed or assisted project is proposed in the bed or banks of a river below, above or on a stream tributary to a designated river or congressionally authorized study river, and the project is likely to result in effects on a designated river or congressionally authorized study river, a determination regarding effects is required under Section 7. Section 7 requires consultation between the river-administering agency and the federal agency assisting the construction of the project. The assisting federal agency typically includes analysis regarding potential impacts to wild and scenic rivers in pertinent NEPA or permitting documents, and the river-administering agency is responsible for conducting the Section 7 analysis and making a determination under the statute. The Section 7 determination should be conducted when sufficient alternative detail and discussion of environmental consequences is available in a NEPA document (Interagency Wild and Scenic Rivers Coordinating Council 2004).

3.13.2 Direct and Indirect Effects

3.13.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently used. Each Section 408 request would be individually

evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, EA, or EIS). Currently, the Sacramento District individually evaluates each Section 408 request for the applicability of Section 7 of the Wild and Scenic Rivers Act. If Section 7 of the Wild and Scenic Rivers Act applies, the Sacramento District consults with the river-administering agency regarding potential effects to the designated river. The potential effects on recreation that proposed alterations processed under the No Action Alternative could have are the same as the effects described for the Preferred Alternative.

3.13.2.2 Preferred Alternative

Construction of the types of alterations described under the Categorical Permission could have effects on recreation if they occur in areas typically used for recreation. In some cases entrances to recreation areas may be restricted or areas may even be closed temporarily during construction. Noise from construction equipment may disturb any public recreating in the vicinity of an alteration and may temporarily deter the public from using the specific area for recreation. In-water construction may disrupt boating on waterways, particularly if barges are utilized. Although construction may disrupt recreation in the vicinity of an alteration, any disruptions would be temporary as alterations proposed under the Categorical Permission must not result in permanent closures of public recreational facilities (see Section 2.3.1 of this PEA).

Although construction could temporarily disrupt recreation, some alterations may result in an increase in the quantity or quality of a recreational area and may thus have a long-term beneficial impact on recreation. For example, new pedestrian or bicycle trails may be installed on the levee crown, increasing public access to recreation. New signage and lighting may be installed in association with trails on the levee crown, improving the quality of a recreational area. Additionally, new stairs may be installed on the levee slopes, potentially improving public access to recreation. Construction of these types of alterations could result in temporary closures or disruptions of recreation, but would result in a long-term beneficial impact on recreation.

Under the Preferred Alternative the Sacramento District would continue to individually evaluate each Section 408 request for the applicability of Section 7 of the Wild and Scenic Rivers Act and would consult with the river-administering agency as appropriate. Currently, the Lower American River in California is the only designated river that is also a USACE federal project located within the Sacramento District. As such, the Sacramento District would consult with the State of California on Section 408 requests requiring a Section 7 determination.

Docks and/or associated access structures must not be installed in a component of the National Wild and Scenic River System, or a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate agency with direct management responsibility for such river has determined, in writing, that the proposed dock and/or associated access structure will not adversely affect the Wild and Scenic River designation or study status.

3.13.3 Cumulative Effects

The geographic analysis area for cumulative effects consists of the USACE federal project areas, as well as any designated recreation areas abutting USACE federal projects within the Sacramento District. The major past, present, and reasonably foreseeable future activities that have affected or could potentially affect recreation in this geographic analysis area are agriculture, construction, fishing (including recreational and commercial), industry, levee and channel operation and maintenance, recreation, and restoration. Past construction activities have resulted in numerous recreation areas located on and adjacent to USACE projects. Current and future construction activities could result in temporary closures of recreation areas in the geographic analysis area; however, some of these activities could actually result in new or improved recreational facilities. Besides construction, all of the aforementioned activities have the potential to either obstruct or enhance recreation, see Table 1 for additional details.

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in the issuance of a slightly higher number of Section 408 permissions per year. The general direct and indirect effects of the types of alterations described in the Categorical Permission are discussed in Section 3.13.2.2. These types of alterations generally have minor and temporary effects on recreation; therefore, implementation of the proposed Categorical Permission would result in a minor contribution to cumulative effects on recreation in the geographic analysis area. Given that the potential effects on recreation that the No Action Alternative could have are the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in a minor contribution to cumulative effects on recreation in the geographic analysis area.

3.14 TRANSPORTATION AND TRAFFIC

3.14.1 Affected Environment

USACE federal projects in the Sacramento District are located in a wide variety of areas, ranging from urban (e.g., Sacramento, Salt Lake City, Reno, Grand Junction), to agricultural (e.g., the Butte Basin in California), to remote (e.g., Big Wash Levee in Beaver County, Utah). Federal projects in urban areas oftentimes have major highways bordering them, bridges crossing over them, and even highways located on them. These federal projects may see large volumes of traffic and may even play a key role in local or regional transportation, particularly the projects that have a highway located on them (e.g., the Garden Highway located on a Sacramento River levee in Sacramento, California). Project levees that are located in more rural, agricultural areas may have agricultural access roads located on their crowns and may be used by farm traffic. Levees and floodplains in rural, agricultural areas may also have highways located on them as well and be used by local or regional traffic. There are also a few federal projects in the Sacramento District that are located in remote areas that generally only see small quantities of local traffic.

3.14.2 Direct and Indirect Effects

3.14.2.1 No Action Alternative

Under the No Action Alternative, the Sacramento District would not implement a Categorical Permission and would continue to review Section 408 requests using the same process that is currently used. Each Section 408 request would be individually evaluated for compliance with environmental laws and NEPA documentation would be prepared at the appropriate level (categorical exclusion, EA, or EIS). The potential effects on transportation and traffic that proposed alterations processed under the No Action Alternative could have are the same as the effects described for the Preferred Alternative.

3.14.2.2 Preferred Alternative

Construction of the types of alterations described under the Categorical Permission could have temporary effects on traffic during the duration of the construction. Construction of most alterations would require vehicles to transport equipment, material, and construction personnel. These vehicles would increase the amount of traffic in the vicinity of a proposed alteration. Some alterations may take place on or near roadways, potentially requiring temporary lane closures or traffic detours during construction. Bridge replacement projects in particular have a high potential to disrupt traffic during construction. However, some types of alterations could have long-term beneficial effects on transportation. For example, bridge replacement or widening projects may have temporary negative effects on traffic during construction, but generally improve transportation once construction is complete. Alterations that involve construction of bicycle or pedestrian trails may improve traffic by providing opportunities for alternative forms of transportation, decreasing the number of vehicles on nearby roads.

Construction activities associated with the types of alterations covered by the proposed Categorical Permission are expected to affect transportation and traffic by increasing the number of vehicles using nearby roads and potentially resulting in lane or entire road closures. However, once construction is complete, the types of alterations covered by the proposed Categorical Permission are expected to have either neutral or beneficial long-term effects on transportation and traffic. Following construction, alterations are not expected to have long-term negative effects.

3.14.3 Cumulative Effects

The geographic analysis area for cumulative effects consists of the USACE federal project areas and adjacent roadways within the Sacramento District. The major past, present, and reasonably foreseeable future activities that have affected or could potentially affect transportation and traffic in this geographic analysis area are construction, industry, and vehicle traffic. Past construction has resulted in new and improved roadways, and additional roadways are expected to be constructed in the future. Present and future construction activities may result in temporary road closures, resulting in temporary negative impacts to traffic; however, the long-term impacts of construction on transportation and thus traffic, are expected to be positive. Industry generally results in additional traffic on the roads

Streamlining the Section 408 review process through implementation of the proposed Categorical Permission could result in the issuance of a slightly higher number of Section 408 permissions per year. The general direct and indirect effects of the types of alterations described in the Categorical Permission are discussed in Section 3.14.2.2. These types of alterations generally have minor and temporary effects on transportation and traffic; therefore, implementation of the proposed Categorical Permission would result in a minor contribution to cumulative effects on transportation and traffic in the geographic analysis area. Given that the potential effects on transportation and traffic that the No Action Alternative could have are the same as the effects described for the Preferred Alternative, the No Action Alternative is expected to result in a minor contribution to cumulative effects on transportation and traffic in the geographic analysis area.

4. REGULATORY SETTING

The following federal laws, regulations, and executive orders are relevant to the proposed action. The Preferred Alternative would be in compliance with all laws, regulations, and executive orders, as described in the following sections.

4.1. FEDERAL LAWS

American Indian Religious Freedom Act of 1978, as amended (42 U.S.C. 1996 *et seq*.)

The American Indian Religious Freedom Act was created to protect and preserve the traditional religious rights, including the access of sacred sites, of American Indians, Eskimos, Aleuts, and Native Hawaiians. Under the Preferred Alternative, the Sacramento District would consult with Native American tribes on proposed alterations that would have the potential to affect cultural resources. This consultation process would provide tribes with the opportunity to identify sacred sites that may be affected by proposed alterations and raise concerns.

Archaeological and Historic Preservation Act of 1974, as amended (54 U.S.C. 312501 *et seq*.)

The Archeological and Historic Preservation Act requires that a federal agency must notify the Secretary of the Interior if its actions may “cause irreparable loss or destruction of significant scientific, prehistoric, historical, or archeological data”. Under the Preferred Alternative, the Sacramento District would evaluate each Section 408 request on a case by case basis for its potential effects on cultural resources. The Sacramento District would consult with the appropriate SHPO or THPO on any proposed alterations that would have the potential to affect historic properties. If a proposed alteration is found to have the potential to cause irreparable loss or destruction of significant scientific, prehistoric, historical, or archeological data, the Sacramento District would notify the Secretary of the Interior before proceeding.

Archaeological Resources Protection Act of 1979, as amended (16 U.S.C. 470 *et seq*.)

The Archaeological Resources Protection Act (ARPA) is intended to secure the protection of archeological resources and sites on federal and Indian lands. ARPA states that the excavation or removal, and any activities associated with such excavation or removal, of any archaeological resource located on federal or Indian lands requires a permit, issued by the Federal land manager. Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request for compliance with ARPA and any proposed activity that would result in the excavation or removal of archaeological resources located on federal or Indian lands would be required to obtain a permit.

Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. 668 *et seq*.)

The Bald and Golden Eagle Protection Act prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" (take is defined as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb”) bald or golden eagles, including their parts, nests, or eggs. Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request for compliance with the Bald and Golden Eagle Protection Act.

Clean Air Act of 1972, as amended, (42 U.S.C. 7401 *et seq*.)

The Clean Air Act regulates air emissions from stationary and mobile sources. Section 176(C) of the Clean Air Act, also known as the General Conformity Rule, prohibits federal agencies from carrying out, funding, or permitting any activity in a nonattainment or maintenance area “which does not conform to an implementation plan after it has been approved or promulgated” (42 U.S.C. 7506). Under the Preferred Alternative, the Sacramento District would continue to conduct a General Conformity review for each individual Section 408 alteration request. The proposed Categorical Permission would only be applicable to proposed alterations that are expected to have emissions below the *de minimis* levels for criteria air pollutants and are thus exempted by 40 CFR 93.153.

Clean Water Act (33 U.S.C. 1344 *et seq*.)

Section 404 of the Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The USEPA promulgates Section 404 regulations; however, the USACE Regulatory Program evaluates and issues permits for proposed activities in waters of the United States. Section 401 of the Clean Water Act requires that applicants for federal permits or licenses provide certification from the state that any discharges will comply with state-established water quality standard requirements. Requesters must obtain a Section 401 certification for the proposed action before USACE can issue a Section 408 permission and before the USACE Regulatory Program can authorize a permit under Section 404. EC 1165-2-220 specifies that USACE will coordinate internally to ensure that the Section 404 permit and the Section 408 permissions are consistent. Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request and coordinate with the USACE Regulatory Program to ensure compliance with the Clean Water Act.

Endangered Species Act of 1973, as amended, (16 U.S.C. 1531 *et seq*.)

The ESA requires federal agencies to consult with the USFWS and/or NOAA Fisheries when their actions may affect federally threatened or endangered species or their designated critical habitat. Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request for potential effects to threatened and endangered species (and their designated critical habitat) listed under the federal ESA and, as appropriate, conduct consultation under Section 7 of the ESA with the USFWS and/or NOAA Fisheries. Additionally, in the future, the Sacramento District may complete programmatic consultation(s) with the USFWS and/or NMFS.

Farmland Protection Policy Act of 1984 (7 U.S.C. 4201 *et seq.*)

The FPPA was instituted in order to "minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government, and private programs and policies to protect farmland." Federal permitting for activities on private or non-federal lands is not considered to be a federal program under the FPPA (7 CFR 658.2).

Fish and Wildlife Coordination Act of 1958, as amended, (16 U.S.C. 661 *et seq*.)

The FWCA requires that federal agencies consult with the USFWS and the head of the agency exercising administration over the wildlife resources of the particular state, "whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever" (16 U.S.C. 662). Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request for the potential to impound, divert, deepen, control, or modify a stream or other body of water and, as appropriate, consult with the USFWS.

Intermodal Surface Transportation Efficiency Act of 1991 (Pub. L. 102-240)

The Intermodal Surface Transportation Efficiency Act established the National Scenic Byways Program, implemented by the Federal Highway Administration (FHWA). The Intermodal Surface Transportation Efficiency Act does not have regulatory authority over federal actions affecting National Scenic Byways. Additionally, the types of alterations covered by the proposed Categorical Permission are not expected to affect the intrinsic values of the designated National Scenic Byways adjacent to or intersecting USACE federal projects within the Sacramento District.

Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended (16 U.S.C. 1801 *et seq*.)

The MSA is the primary law governing marine fisheries management in U.S. federal waters. It requires that fishery management councils identify as EFH those areas necessary for fish to perform their basic life functions. The MSA also requires that federal agencies consult with NOAA Fisheries when their actions may adversely impact EFH. Under the Preferred Alternative, the Sacramento District would continue to

individually evaluate each Section 408 request for potential adverse effects to EFH and would consult with NOAA Fisheries as appropriate.

Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. 703 *et seq*.)

The Migratory Bird Treaty Act established "that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not." Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request for potential effects to migratory birds and to ensure compliance with the Migratory Bird Treaty Act.

National Environmental Policy Act of 1969, as amended, (42 U.S.C. 4321 *et seq*.)

NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to decision making. This PEA has been prepared following CEQ NEPA Regulations (40 CFR 1500-1508), the USACE ER 200-2-2 (33 CFR 230), and the CEQ guidance on the *Effective Use of Programmatic NEPA Reviews* (CEQ 2014), and satisfies the NEPA requirement. Under the Preferred Alternative, the applicability of this PEA to individual proposed alterations would be validated using the validation memo described in section 2.3.

National Historic Preservation Act of 1966, as amended (54 U.S.C. 300101 *et seq*.)

Section 106 of the NHPA requires federal agencies to take into account the effects of their actions on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such actions (54 U.S.C. 306108). Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request on a case-by-case basis for the potential to affect cultural resources and, when there is the potential to affect, conduct consultation with the appropriate SHPO or THPO and Native American tribes pursuant to Section 106 of the NHPA. Additionally, the Sacramento District may develop programmatic agreements with the appropriate SHPO(s) and tribe(s).

Native American Graves and Repatriation Act of 1990 (25 U.S.C. 3001 *et seq*.)

The Native American Graves and Repatriation Act (NAGPRA) provides protection for Native American burial sites and control over the removal of Native American human remains, funerary objects, sacred objects, and items of cultural patrimony on federal and tribal lands. Under the Preferred Alternative, if proposed alterations are located on federal or tribal land, they would be reviewed on a case-by-case basis for compliance under the NAGPRA. A Plan of Action for inadvertent discoveries of Native American cultural items would be prepared for all proposed alterations located on federal or tribal land.

Noise Control Act of 1972, as amended (42 U.S.C. 4901 *et seq*.)

The Noise Control Act established a national policy to promote an environment for all Americans free from noise that jeopardizes their health or welfare. The Categorical

Permission proposed under the Preferred Alternative is in compliance with the Noise Control Act.

Plant Protection Act of 2000 (7 U.S.C. 7701 *et seq*.)

The Plant Protection Act states that "the detection, control, eradication, suppression, prevention, or retardation of the spread of plant pests or noxious weeds is necessary for the protection of the agriculture, environment, and economy of the United States." Furthermore, the Act prohibits the import, entrance, export, or movement in interstate commerce of any plant pest, unless authorized by permit issued by the Secretary of Agriculture (7 U.S.C. 7711). The proposed Categorical Permission would not result in the import, entrance, export, or interstate movement of plant pests; additionally, under the Categorical Permission, requesters would be required to use seed mixes containing only native plant species.

Rivers and Harbors Appropriation Act of 1899 (22 U.S.C. 403 *et seq*.)

Section 10 of the Rivers and Harbors Appropriation Act (33 U.S.C. 403) requires that the construction of any structure in, over or under any navigable water in the United States receive a permit. This applies to all structures and any dredging or disposal of dredged materials, excavation, filling, rechannelization, or any other modification of a navigable water of the U.S. Additionally, Section 10 applies outside of navigable water if any structure or work will affect the course, location, or condition of a navigable water. The USACE Regulatory Program is responsible for the issuance of permits under Section 10. EC 1165-2-220 specifies that USACE will coordinate internally to ensure that the Section 10 permit and the Section 408 permissions are consistent. Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request and coordinate with the USACE Regulatory Program to ensure compliance with Section 10.

Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1273 *et seq*.)

The Wild and Scenic Rivers Act is intended to preserve, in a free-flowing condition, certain rivers with outstanding natural, cultural, and recreational values. Specifically, the Act prohibits federal agencies from assisting in the construction of any water resources project that would have a direct and adverse effect on a designated river or congressionally authorized study river. Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request for applicability of Section 7 of the Wild and Scenic Rivers Act, and would consult with the appropriate river-administering agency as appropriate.

Docks and/or associated access structures must not be installed in a component of the National Wild and Scenic River System, or a river officially designated by Congress as a study river for possible inclusion in the system while the river is in an official study status, unless the appropriate agency with direct management responsibility for such river has determined, in writing, that the proposed dock and/or associated access structure will not adversely affect the Wild and Scenic River designation or study status.

4.2 EXECUTIVE ORDERS (E.O.)

E.O. 11988, Floodplain Management

E.O. 11988 requires that each agency "avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative". The guidelines for implementing E.O. 11988 outline an eight-step process for complying with E.O. 11988 (FEMA 2015):

Step 1: Determine if the proposed action is in a floodplain.

The majority of federal projects located within the Sacramento District are located within a floodplain.

Step 2: Provide public review.

Section 2 of E.O. 11988 requires federal agencies to provide opportunity for early public review prior to taking an action, provide public notice explaining a proposed action, and prepare and circulate a notice of findings and explanation prior to taking an action. The E.O. requirements for public participation are primarily being accomplished under existing USACE regulations.

Step 3: Identify and evaluate practicable alternatives to the proposed action or to locating the proposed action in the floodplain.

Step 4: Identify the effects of the proposed action.

Step 5: Develop measures to minimize impacts and restore and preserve the floodplain as appropriate if impacts cannot be avoided.

Step 6: Reevaluate alternatives.

Step 7: Issue findings and a public explanation.

Step 8: Implement the action.

A condition of the Preferred Alternative, is that no proposed alteration may induce additional development within the floodplain. Further, the Sacramento District would conduct individual review of all proposed alterations covered by the proposed Categorical Permission to ensure that they comply with E.O. 11988.

E.O. 11990, Protection of Wetlands

E.O. 11990 directs federal agencies to "minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands." Although E.O. 11990 does not apply to the issuance by federal agencies of permits to private parties for activities involving wetlands on non-federal property, it does apply to activities involving wetlands on federal property. Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request and coordinate with the USACE Regulatory Program to ensure compliance with the Clean Water Act.

E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

In accordance with Title III of the Civil Rights Act of 1964 and Executive Order 12898, the proposed Categorical Permission would neither directly or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin nor would it have a disproportionate effect on minority or low-income communities.

E.O. 13007, Indian Sacred Sites

E.O. 13007 requires that, when managing Federal lands, executive branch agencies shall "(1) accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and (2) avoid adversely affecting the physical integrity of such sacred sites." Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request on a case-by-case basis for the potential to affect cultural resources and, when there is the potential to affect Indian sacred sites, conduct consultation with the appropriate Native American tribes.

E.O. 13112, Invasive Species

E.O. 13112 requires that federal agencies identify their actions that may affect the status of invasive species and "not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere". Under the Preferred Alternative, the Sacramento District would require requesters to use seed mixes containing only native plant seeds. The Sacramento District would not issue Section 408 permission for actions that are likely to cause or promote the introduction or spread of invasive species.

E.O. 13175, Consultation with Indian Tribes, Alaska Natives, and Native Hawaiians

E.O. 13175 requires that federal agencies seek "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." Under the Preferred Alternative, the Sacramento District would continue to individually evaluate each Section 408 request on a case-by-case basis for the potential to affect cultural resources and, when there is the potential to affect, coordinate with the appropriate Native American tribes.

E.O. 13751, Safeguarding the Nation from the Impacts of Invasive Species

E.O. 13751 states that it "is the policy of the United States to prevent the introduction, establishment, and spread of invasive species, as well as to eradicate and control populations of invasive species that are established." Under the Preferred Alternative, the Sacramento District would require requesters to use seed mixes containing only native plant seeds.

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APPENDIX A: PUBLIC SCOPING RECORD

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Summary table of substantive public comments and questions received in response to the 2017 and 2018 Section 408 Categorical Permission Public Notices as well as USACE responses to comments. Please note that USACE only responded to substantive comments or questions regarding the proposed Categorical Permission. The full text of all public responses is attached following this table.

Comment Number	Summarized Comment or Question	USACE Response
Email received from AnMarie Medin, California State Historic Preservation Office on September 15, 2017		
A-1	"Would you please be able to explain to us how Section 106 will factor into this approach?"	Under the proposed Categorical Permission the Sacramento District would continue to individually evaluate each Section 408 request on a case-by-case basis for the potential to affect cultural resources and, when there is the potential for effects, conduct consultation with the appropriate State Historic Preservation Officer or Tribal Historic Preservation Officer pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 *et seq.*). When a proposed alteration has the potential to affect cultural resources, the Sacramento District would coordinate, and consult as appropriate, with potentially interested Native American tribes. See Section 3.11 for further discussion of how Section 106 would factor into the proposed Categorical Permission.
Email received from Wendy Fisher on September 15, 2017		

Comment Number	Summarized Comment or Question	USACE Response
B-1	"…how this might affect the Section 408 permit we will be pursuing for the Knights Landing Boat Launch project. Might the project qualify for this Categorical Permission (more streamlined process)?"	If the proposed project fits under one of the described alterations in the Categorical Permission it may qualify, if not it would go through the review process as described in EC 1165-2-220.
Email received from Barry O'Regan on September 16, 2017		
C-1	"Can you please add me to the mailing list for notifications on Categorical Permission for Section 408 Requests?"	Individual added to the mailing list.
Email received from Joseph Morgan, USEPA Region IX - Water Division, on September 28, 2017.		
D-1	Requested a meeting and indicated desire to discuss how the acreages and categories of activities were arrived at as well as how the Categorical Permission may influence non-404-regulated waters.	USACE staff sent two reply emails suggesting meeting times and did not receive any further response. See Sections 3.4 and 3.5 for discussions of potential impacts on water quality and wetlands.
Email received from Eric McGrath, California Department of Water Resources, Division of Flood Maintenance, on October 11, 2017		

Comment Number	Summarized Comment or Question	USACE Response
E-1	"Can these proposed Categorical Permissions be stacked like Nationwide Permits for a project? An example would be 1) Agriculture and Landscaping which allows irrigation line in the floodplain be combined with 12) Restoration where irrigation of native plantings would be needed? This would help DWR's understanding of how to best use these Categorical Permissions in implementing projects under the Central Valley Flood Protection Plan (CVFPP), such as restoration activities within the flood system."	The alterations described under the proposed Categorical Permission could be stacked. A single proposed project could combine multiple categories of alterations (for example, restoration with irrigation lines) and still fit under the proposed Categorical Permission. Each individual alteration type contained within the overall project must adhere to the size limitations for that specific type of alteration. The total area associated with the overall project must not exceed the largest alteration size limit. Using the example above, the area of irrigation lines must not exceed 350 acres and the area of restoration must not exceed 500 acres or 5000 linear feet, but the total area associated with the project overall must not exceed 500 acres or 5000 linear feet.
E-2	"For Endangered Species Act compliance with section 7 consultation, either a biological assessment template or a programmatic biological assessment would provide even more efficient processing and review of these Categorical Permissions."	With input from the USFWS and NOAA Fisheries, USACE has developed a template biological assessment. USACE has distributed this template to non-federal sponsors and it will be made available to Section 408 requesters when applicable.

Comment Number	Summarized Comment or Question	USACE Response
E-3	"For historical/cultural and tribal assessment, having a programmatic agreements in place with the State Historical Preservation Officer and tribes would make the Categorical Permission process even more efficient."	USACE is in the process of developing Section 106 programmatic agreements for Section 408 activities in the Sacramento District. As part of the process USACE has engaged pertinent tribes, SHPOs, and the Advisory Council on Historic Preservation.
E-4	"For item #8, Erosion Control and Bank Stabilization – The limit of one cubic yard of fill per linear foot greatly restricts the use of these Categorical Permissions. The volume of fill will vary greatly depending upon slope length. For example, if repairing an erosion that extends up the slope 20 feet, using a 2 foot thickness for the riprap blanket, equals 1.5 cubic yards/linear foot. Suggest removing the volume limit or increasing it to 3 cy/ft."	USACE Sacramento District staff concurred with DWR's suggestion and removed the limit on the amount of fill per linear foot for erosion control and bank stabilization alterations. See Section 2.3.10 for the alteration description for Erosion Control and Bank Stabilization.
E-5	"For item #9, Fences and Gates – the limit of posts not penetrating more than 12-inches is too restricting. Gates across levees to prevent public access (as required by O&M manuals) require a deeper foundation. Suggest allowing penetrations to at least the design water surface (penetrations through the freeboard)."	USACE Sacramento District staff concurred with DWR's suggestion and revised the alteration description to allow penetration greater than 12-inches into the levee. See Section 2.3.11 for the alteration description for Fences, Gates, and Signage.
E-6	"For item #11, Pipes – Paragraph 3 states that when using open cut method, the levee material is replaced according to design criteria. What design criteria is this based upon? If the existing levee is constructed of a material that is no longer suitable according to current regulations, then only that small segment that	Removed this wording. Additional design criteria for pipes is included in Enclosure 2 of the Categorical Permission document.

Comment Number	Summarized Comment or Question	USACE Response
	is excavated will meet current regulation. The material change in this wedge of levee may not shrink/swell the same as the existing soil and may create unforeseen issues."	
Letter received from Reclamation District 17 on October 17, 2017		
F-1	"It is not clear from the notice how the proposed Categorical Permissions will reduce the current delays and costs of 408 permitting…"	The proposed Categorical Permission would streamline the Section 408 review process by lowering the level of technical review for some alteration types to the 408 Permission Section and lowering the decision level for some Section 408 requests to the Operations Branch Chief. See Section 2.3 for additional information.
F-2	"Removal, repair or replacement of penetrations through the levees should not require any permit process so long as inspected by the LMA engineer and reported to the CVFPB."	Per EC 1165-2-220, "routine operations and maintenance (O&M) activities specified in the O&M manual and performed by the non-federal sponsor or USACE do not require permission from USACE under Section 408." All proposed alterations to USACE federal projects that are not maintenance require Section 408 permissions.
F-3	"Widening and raising the crown, flattening the landside slopes, constructing landside toe and seepage berms, installing toe drains and the like should be allowed if meeting minimal engineering standards set forth in the O&M manual. Even sheet piles and seepage cut off walls installed according to generally accepted engineering standards should be considered."	The proposed Categorical Permission includes seepage and stability berms (see Section 2.3.20). The other types of alterations suggested by Reclamation District 17 would be subject to the current Section 408 review process as described in EC 1165-2-220 (see Section 1.2).

Comment Number	Summarized Comment or Question	USACE Response
F-4	"When it comes to project levees, the type of environmental review or compliance should not be relevant as to whether or not there is impairment of the usefulness of the project or whether the work is injurious to the public interest as a matter of Section 408."	Per guidance in EC 1165-2-220, a decision on a Section 408 request is a federal action and is therefore subject to the NEPA and other environmental compliance requirements. Additionally, EC 1165-2-220 states that "[f]actors that may be relevant to the public interest depend upon the type of USACE project being altered and may include, but are not limited to, such things as conservation, economic development, historic properties, cultural resources, environmental impacts, water supply, water quality, flood hazards, floodplains, residual risk, induced damages, navigation, shore erosion or accretion, and recreation."
F-5	"…some of the items proposed for Categorical Permission could be very damaging to levees. For example, including borrow site excavations only 100 feet from the waterside or landside levee toes and below ground swimming pools within 15 feet is not a good idea."	Comment noted. Under the proposed Categorical Permission borrow site excavations must be located a minimum of 300 feet from levee toes and below ground swimming pools must be located a minimum of 15 from the waterside or landside levee toes.
F-6	"Where HDD entry or exit sites are below the water levels in the waterway, particularly during the construction period the entry and exit points should be located well back from the levee or adequately leveed or otherwise contained."	The entry and exit points of HDD pipe must be located a minimum of 300 feet from the landside levee toe. See Enclosure 2 of the Categorical Permission document for additional details.

Comment Number	Summarized Comment or Question	USACE Response
F-7	"These Categorical Permissions particularly need some engineering conditions that are relevant to the particular Categorical Permission at issue."	See Enclosure 2 of the Categorical Permission document for detailed descriptions, including engineering conditions, of each type of alteration covered by the proposed Categorical Permission.
F-8	"Levee crown raising and widening to the landside, flattening the landside slopes, constructing landside toe and seepage berms, installing toe drains and the like should be added."	See response to F-3.
F-9	"The proposed Categorical Permissions' limitations as to size, including lineal footage, square footage, acreage etc. appear to be arbitrary."	Size limitations are based on a review of past projects that were determined to be minor alterations that individually and cumulatively would not result in significant effects on the environment. Limitations described in relevant USACE Nationwide Permits were also considered.
F-10	"…the Sacramento District should clarify how the District intends to document that a Categorical Permission applies to a particular activity when a proposed action is covered by a Categorical Permission."	See Section 2.3 and the Categorical Permission document for information regarding documentation of Categorical Permission applicability to individual Section 408 requests.
Letter received from the California High Speed Rail Authority on October 18, 2017		
G-1	"Further, we urge the Corps to develop specific standard mitigation measures and best management practices (BMPs) that are easily understood and that are commensurate with the minor impacts caused by the proposed alteration."	See Section 2.3.1 for a list of conditions.

Comment Number	Summarized Comment or Question	USACE Response
Letter received from the Sacramento Water Forum on October 18, 2017		
H-1	"However, the Categorical Permission process is still rife with inefficiencies and more cumbersome than need be. The public notice is unclear as to what exactly is being exempted. As we understand it the USACE would send federal agencies to apply to a non-federal sponsor and in our case the Central Valley Flood Protection Board (CVFPB) (whose regulations do not apply to federal agencies) has been designated as that non-federal sponsor. As proposed, the process appears to include requirements for independent project evaluations."	The proposed Categorical Permission would not exempt any alterations from Section 408 review. The proposed Categorical Permission would simply create a more efficient and streamlined review process for certain types of alterations meeting specific conditions. EC 1165-2-220 states that a request to alter a USACE project can originate from a non-federal sponsor or an independent requester. However, for USACE projects with a non-federal sponsor, "the requester must either be the non-federal sponsor or have the endorsement of the non-federal sponsor prior to a written request…being submitted to USACE."
H-2	"We therefore propose an additional approach that may better support our ongoing partnership: Recognizing that the restoration projects are a part of federal project operations and mitigation and need not, therefore, undergo a separate 408 review (or, at most, one that is extremely streamlined)."	Proposed alterations determined by the non-federal sponsor or USACE to be maintenance do not require Section 408 permissions. All proposed alterations to USACE federal projects that are not determined by the non-federal sponsor or USACE to be maintenance require Section 408 permissions.

Comment Number	Summarized Comment or Question	USACE Response
H-3	"We suggest that members of the federal family, especially those working jointly with the Corps in water management, be determined to be acting in the "public interest" per Section 408, with no need for further review of their operations efforts, on the basis that they have mutual goals, objectives, and regulatory requirements."	"Section 408 authorizes the Secretary of the Army to grant permission for the alteration or occupation or use of the project if the Secretary determines that the activity will not be injurious to the public interest and will not impair the usefulness of the project." (EC 1165-2-220). According to EC 1165-2-220, an alteration refers to "any action by any entity other than USACE that builds upon, alters, improves, moves, occupies, or otherwise affects the usefulness, or the structural or ecological integrity, of a USACE project. Alterations also include actions approved as 'encroachments' pursuant to 33 CFR 208.10." Following appropriate technical review, as described in EC 1165-2-220, Section 408 permissions may be granted for specific alterations, not as a "blanket permission" to particular agencies or groups.
H-4	"Reclamation partnered with USACE through the Joint Federal Project (JFP) and as we understand it this resulted in the entire lower American River being newly subjected to Section 408 permitting."	The requirements for obtaining a Section 408 permission were established when EC 1165-2-220 was published on July 31, 2014. The USACE Section 408 jurisdiction includes the channel of the lower American River from the confluence of the Sacramento River to Folsom Dam and associated federal levees. However, maintenance activities do not require permission under 33 U.S.C. 408.

Comment Number	Summarized Comment or Question	USACE Response
H-5	"We therefore propose that, via modifications to the Categorical Permission or another means, that the Corps make clear that restoration projects commissioned as part of JFP operations and mitigation do not require further state-level review, or an extended Section 408 review process, and are inherently in the public interest, as they serve the purposes of the JFP and the Endangered Species Act."	Alterations not considered to be maintenance, as defined in EC 1165-2-220, require Section 408 permissions. Proposed alterations must be reviewed individually to determine the probable impacts on the public interest; EC 1165-2-220 specifies that public interest determinations require "a careful weighing of all those factors that are relevant in each particular case."
H-6	"Alternately, if the Corps is unable simply to recognize that the Section 408 process is not appropriate here, it should go further to streamline the process. This category of projects should be subject to a review process, tailored as allowed by EC 1165-2-216, to allow for their swift implementation."	Restoration activities are a type of alteration described under the proposed Categorical Permission.
Letter received from Pacific Gas and Electric Company on October 18, 2017		

Comment Number	Summarized Comment or Question	USACE Response
I-1	"Comment 1- Proposed Categorical Permissions – (11.) Pipe Alterations: The current proposed language includes descriptions of some methods used for pipeline construction. We recommend that the permission language be expanded to include all pipeline construction and maintenance activities that might otherwise trigger the need for a Section 408 authorization. In addition, we recommend that the methods used to construct and maintain pipelines allow for use of best technologies available and include examples of additional technologies associated with pipeline maintenance and construction. Further, we recommend that new pipeline construction be covered under the Categorical Permission if permanent impacts are a maximum of 1 acre, mirroring the proposal under the "poles" category. Last, for consistency, we recommend that the limit on utility poles associated with pump installations be a limit on permanent impacts, not on the number of poles."	Specific pipeline construction methods are no longer identified in the Categorical Permission; all pipelines must be designed and installed in accordance with current USACE standards. Proposed alterations determined by the non-federal sponsor or USACE to be maintenance do not require Section 408 permissions. The maximum area of disturbance associated with gravity pipes is 2.5 acres, the maximum area of disturbance for fiber optic and dry utility pipes is 5 acres, and the maximum area of disturbance for pressurized pipes is 5 acres. Installation of utility poles, including limits on impacts, is described in the Utility Poles alteration description.
I-2	Recommend replacing the existing text on lines 11-13 in Section 2.3.12 (pipes alteration description) with the following text: "The proposed Categorical Permission applies to requests for new, long distance pipelines crossing multiple USACE navigation and flood risk reduction projects or crossing a single project in multiple locations, provided permanent impacts within the federal projects areas are subject to a maximum limit of one acre."	The proposed Categorical Permission could apply to new, long distance pipelines crossing multiple USACE federal projects, provided the individual alteration requests comply with the Categorical Permission.

Comment Number	Summarized Comment or Question	USACE Response
I-3	Recommend adding the following text to the pipes alteration description in Section 2.3.12: "Utility poles associated with the installation of a pump are subject to a maximum limit of one acre permanent impact."	Utilities associated with the installation of pumps would be included under the 5 acre total area and not limited to the number of poles. Installation of utility poles, including limits on impacts, is described in the Utility Poles alteration description.
I-4	Original text from Section 2.3.12: "Pipes may be installed using open cut methods (e.g., trenching) or horizontal directional drilling (HDD) methods." Recommended revision: "Pipes may be accessed or installed using best available technology to meet industry standards. Such methods include but are not limited to open cut methods (i.e. trenching), horizontal directional drilling (HDD) methods, jack and bore, geotechnical boring and potholing."	See response to I-1.
I-5	Recommend adding the following text to Section 2.3.12: "Jack and bore involves construction of two shafts down to the depth of the pipeline. A horizontal boring is made connecting one pit to the other without disturbing the surface between the two shafts. Geotechnical boring is a technique used to obtain information on the physical properties of soil and rock in the project area and involves vertical boring of varying diameters and depths. Potholing is performed to confirm the depth of other structures and utilities. This is often done with a vacuum truck or digging a small hole using an excavator when the utility is deep	See response to I-1.

Comment Number	Summarized Comment or Question	USACE Response
	or has an odd structure or shape that makes the use of vacuum excavation difficult."	
I-6	"Comment 2 – Clarification of Section 408/USACE Jurisdiction – In order to ensure consistent interpretation of the USACE's jurisdiction for alterations within project boundaries, we recommend that the specific policy siting, (6c), from the circular 1165-2-216 Policy and Procedural Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects pursuant to 33 USC Section 408, be included in the final approved Categorical Permission."	Comment noted.
Letter received from the Central Valley Flood Protection Board on October 18, 2017		
J-1	"The proposed Categorical Permissions for Section 408 requests, simplifies the review process for minor alterations. Construction projects categorized as minor alterations that are similar in nature and having similar impacts are appropriate for streamlining within the Section 408 permission process."	Comment noted.
Letter received from the California Central Valley Flood Control Association dated October 17, 2017		
K-1	"We suggest the addition of a new alteration type that would include public safety, recreational, and aesthetic features, such as signs and lighting."	Signage has been included in the Fences and Gates alteration description. Lighting has been added to the Utility Poles alteration description.
K-2	"It should be clarified that the Categorical Permission would only apply to alterations occurring within the	Comment noted.

Comment Number	Summarized Comment or Question	USACE Response
	lands and real property interests identified and acquired for USACE projects."	
K-3	"The Categorical Permission includes twenty alteration types with varying technical constraints. It is unclear if the technical constraints are intended to limit the type of alteration that is covered by the Categorical Permission, or if the intent is to change the level of technical review required as long as the alteration meets the stated constraints, or neither. Assuming that the engineering criteria is unchanged, and must be met for all alterations, we suggest removing any specific technical constraints from the alteration types. For example, under section *9.Fences and Gates,* it states that, *'Fences must be constructed of see-through materials such as chain link or barbed wire ... must not penetrate more than 12 inches into the levee prism'.* It is not apparent that these constraints affect the magnitude of environmental effects; therefore, the reason for their inclusion is unclear."	The criteria for the technical review would not change, only the review and decision process would change under the proposed Categorical Permission. Technical constraints described in the alteration descriptions are intended to limit the activities that are covered by the Categorical Permission and to change the level of technical review required, provided the alteration meets the stated constraints. Technical constraints for 408 approval, in general, are unchanged from current criteria.
K-4	"If the intention is indeed to apply an engineering constraint to limit the type of alteration covered, we suggest adding other limitations. For example, under section *5. Bridges,* in order for replacement of bridges to be covered by the Categorical Permission, we suggest requiring that the lowest chord be at, or above, the DWSE or be located at least a foot above the existing."	See response to K-3.

Comment Number	Summarized Comment or Question	USACE Response
K-5	“It should be clarified that the Categorical Permission would not apply to alterations that do not meet engineering criteria, the Categorical Permission does not change engineering criteria, nor does it change the need for technical review, if that is correct.”	See response to K-3.
K-6	“For clarity, we suggest that if the alteration type is limited to a certain location within the project right-of-way that it be written as such. For example, "The Categorical Permission for swimming pools is limited to those located in the floodway and more than 15 feet from the waterside toe". In some cases, a location is specifically identified and in others, no location is identified.”	We have included locations when they are relevant to the alteration type and within the lands and real property interests identified and acquired for the USACE project.
K-7	“There seems to be inconsistency or nuances in the terms used that are not clear (e.g., levee prism, levee slopes, levee).”	See Figures 4 and 5.
K-8	“It is unclear when the actions are allowed to occur within the O&M corridor (i.e., between the levee toe and floodway, and landside levee toe and ROW limit). For example, fences and gates are allowed on the levee and in the floodway. Is the intent to exclude fences and gates off the levee, but not in the floodway?”	The alteration description applies to fences and gates proposed within the lands and real property interests identified and acquired for the USACE project.

Comment Number	Summarized Comment or Question	USACE Response
K-9	“The proposed Categorical Permission would benefit from a category of standard levee improvements, although some examples of these actions were already included separately. For example, the Department of Water Resources' Rural Levee Repair Guidelines provide standard repair templates for rural levees that could be covered by the Categorical Permission. Other examples would be relief wells and levee performance monitoring activities (e.g. piezometers, settlement monuments).”	The most common standard levee improvements that have minor impacts to the environment are included in the Categorical Permission. Standard repair activities covered in the O&M manual are considered maintenance and do not require a Section 408 permission. Instrumentation has been added to the Borings and Other Levee Explorations alteration description.
K-10	“Most of the twenty alteration types include a threshold for ground disturbance. It is unclear how this threshold was determined and why it varies among the alteration types. From an environmental effects perspective, why is the limit 2 acres for a building or structure, 5 acres for borrow sites, 2.5 acres for an access ramp, 2000 square feet for a swimming pool, and 350 acres for agriculture and landscaping? Similar programmatic/Categorical Permissions developed by other USACE Districts do not provide ground disturbance thresholds.”	See response to F-9. Additionally, the Categorical Permission would be reevaluated periodically, which could include reviewing/modifying ground disturbance thresholds as necessary.

Comment Number	Summarized Comment or Question	USACE Response
K-11	"We suggest that inspection of trenches and test pits be included. Also, the following text, *'A variety of drilling methods may be used...'* should be revised to *'Exploration types include ... ',* as CPTs and borings are not drilling types."	Inspections are not considered to be alterations and do not require a Section 408 permission. We have added "Levee Explorations" to the Borings alteration description and included the following: "Borings and levee explorations include, but are not limited to; conventional geotechnical borings, cone penetration testing, hydrovacing, potholing, and trenching."
K-12	"The text states that borrow sites are allowed in the floodway, but later states that the borrow sites must be 100 feet from the waterside and landside toes. This distance seems arbitrary and it is unclear why that distance affects environmental effects (see comment a.). It is also unclear if borrow sites located at least 100 feet from the *landside levee toe* are allowed, and even if this is the case, these would likely be outside the project right-of-way and not subject to Section 408."	Under the proposed Categorical Permission, borrow site excavations has been changed to a minimum of 300 feet from the waterside or landside levee toes per engineering requirements. Borrow sites outside of the specified distance have a lower likelihood of impacting the functioning of the levee. Borrow areas within the specified distance have a higher likelihood of impacting the functioning of the levee and would not fall within the Categorical Permission. The proposed Categorical Permission only applies to alterations proposed within the lands and real property interests identified and acquired for the USACE project and to lands available for USACE projects.
K-13	"We suggest also including bollards. Additionally, we suggest revising the text from, *'must not limit access or visibility...'* to *'must allow for access and visibility...*' or alternatively, clarifying '*limit access or visibility'.*"	Comment noted.

Comment Number	Summarized Comment or Question	USACE Response
K-14	"We suggest allowing removal of existing penetrations in addition to abandonment and modification."	USACE staff added the removal of existing penetrations to Gravity Pipes and Pressurized Pipes alteration descriptions.
K-15	"We suggest allowing underground utility lines, such as fiber optic, electric, etc."	Fiber optic and utility lines are included in the proposed Categorical Permission, see Section 2.3.
Letter received from the Carson-Truckee Water Conservancy District dated November 3, 2017		
L-1	"…the District asks you to consider using the local sponsor to play a role in the determination review process."	Comment noted.
Letter received from the U.S. Bureau of Reclamation, Bay-Delta Office dated November 16, 2017		
M-1	"As we understand it, the entire Lower American River became subject to Section 408 with the construction of the new Folsom Dam Auxiliary Spillway."	See response to H-4.
M-2	"The September 18, 2017, public notice implies that restoration projects up to the designated size would be exempted from Section 408. However, the USACE would send Federal agencies to apply to a non-Federal sponsor. In our case, the Central Valley Flood Protection Board (whose regulations do not apply to Federal agencies) has been designated as the non-Federal sponsor for projects in the Central Valley of California. It appears the proposed permission covers an exemption of internal USACE processes but not other Federal applicants."	See response to H-1.

Comment Number	Summarized Comment or Question	USACE Response
M-3	"We support the Categorical Permission proposed by the USACE and propose incorporating other Federal agencies into Section 408 procedural guidance by exempting Federal project applicants from requiring a non-Federal sponsor."	See response to H-1.
M-4	"The new review requirements already reduce the ability to incorporate adaptive management into project designs by imposing a 2-year permitting delay period."	The proposed Categorical Permission does not impose specific timeframes for Section 408 review.
M-5	"A layer of State-level review does not appear warranted. Federal agencies, especially those charged with maintaining and operating dams, should be able to coordinate directly with the USACE."	See response to H-1.
M-6	"Thus, though we support the Categorical Permission for Restoration, we recommend that coordination occur directly between the USACE and other Federal agencies."	See response to H-1.
M-7	"Recognizing that restoration projects are a part of Federal project operations and mitigation they would need not, therefore, undergo a separate 408 review by the State."	See responses to H-1 and H-2.
Letter received from the State of Colorado, Office of Archaeology and Historic Preservation dated October 15, 2018		
N-1	Letter identifies that alterations in the Project Description would require consultation under Section 106 of NHPA.	Under the proposed Categorical Permission, USACE would conduct necessary consultations for all proposed alterations on a case by case basis.

Comment Number	Summarized Comment or Question	USACE Response
Email received from John Wikert, U.S. Fish and Wildlife Service Anadromous Fish Restoration Program on October 18, 2018		
O-1	"I did want to share one concern that might disqualify many of our restoration projects: '8. The alteration would require an Environmental Assessment or Environmental Impact Statement.'"	Any alteration that can be approved under the Categorical Permission would be covered under NEPA by the programmatic EA. To avoid confusion, this disqualifying circumstance has been removed. Alterations that don't fit under a categorical permission or have effects on a resource that have not been disclosed in this programmatic EA would require different NEPA compliance that would be determined on a case by case basis.
Letter received from the Sacramento Metropolitan Air Quality District dated October 22, 2018		
P-1	"Sac Metro Air District requests the Army Corps analyze emissions from each of the typical project types included in the Categorical Permission and compare the results to local air district thresholds of significance, which are much lower and more health protective than the de minimis air quality standards."	Per EC 1165-2-220, landowner permission and any other applicable federal, state, or local permits need to be secured before work can begin as a requirement for a Section 408 permission. Environmental condition number 9 added to the Categorical Permission.
P-2	"Sac Metro Air District requests the Army Corps include the attached Basic Construction Emission Control Practices as a minimum standard mitigation measure for all projects covered by the Categorical Permission."	The Basic Construction Emission Control Practices has been forwarded to the Central Valley Flood Protection Board, USACE's non-federal sponsor covering the Sacramento Metropolitan Air Quality District, for dissemination to requesters of Section 408 permissions. See response to comment P-1.

Comment Number	Summarized Comment or Question	USACE Response
P-3	"If the air emissions analysis for the Categorical Permission programmatic environmental assessment indicates emissions may exceed Sac Metro Air District thresholds of significance for the typical project types, the Sac Metro Air District recommends adding the Enhanced Exhaust Control Practices and Enhanced Particulate Fugitive Dust Control Practices as standard mitigation or best management practices to the project types identified/expected to need the additional mitigation."	See response to comment P-1.
P-4	"All projects are subject to Sac Metro Air District rules in effect at the time of construction. The Sac Metro Air District's Rules Statement is attached and should be included as a reminder to all Section 408 requests covered under the Categorical Permission."	See response to comment P-1.
Letter received from the California Central Valley Flood Control Association dated November 05, 2018		
Q-1	"The draft document provides that a categorical permission would not be available if '[t]he alteration would require an Environmental Assessment or Environmental Impact Statement.' The draft document should be changed to remove the reference to preparation of an EA."	See response to comment P-1.

Comment Number	Summarized Comment or Question	USACE Response
Q-2	"The draft document provides for fence permission but notes that '[g]ates must be wide enough to allow personnel, equipment, and vehicle access. In general, swing gates are preferred to rolling gates.' For parallel fences along residential back yards or along public parks and may be sitting right on the Federal easement may not need to be wide enough for vehicle access."	"Gates must be wide enough to allow personnel, equipment, and/or vehicle access where appropriate" language added to Fences, Gates and Signage description.
Q-3	"The categorical permissions should also include the installation of slurry walls."	A slurry wall currently requires a Safety Assurance Review (SAR). Projects requiring a SAR must be approved above the District level, which is a disqualifying circumstance.
Q-4	"We believe that a 5 acre limitation on seepage and stability berms is too limiting… We believe that the 5 acre limitation should be modified to 10 acres."	Previous seepage and stability berm projects approved by the USACE with minimal adverse impacts have been approximately 10 acres or less in size. The size limitation has been changed to 10 acres for seepage and stability berms.
Q-5	"Finally, in regard to irrigation wells, we believe they should have to be a minimum of 50 feet from the levee toe to be considered as a categorical permission. Wells any closer to the flood control project have the potential for seepage impacts to the levee."	The likelihood of a waterside well negatively impacting the seepage performance of the levee is low for wells located between 15 and 50 feet from the waterside levee toe.

Comment Number	Summarized Comment or Question	USACE Response
Q-6	"The draft document provides that a categorical permission would not be available if '[t]he alteration would remove riparian or sensitive habitat.' However it's not unusual for even a minor flood repair project to require, for example, the relocation of a valley elderberry bush, or the removal of a waterside tree."	We have revised the categorical permission to state that a loss of sensitive habitat or a net loss of riparian habitat would be a disqualifying circumstance. Elderberry shrub removal or other effects to species or habitats covered under Section 7 of the Endangered Species Act would be consulted on with the appropriate Resource Agency.
Letter received from the Utah Public Lands Policy Coordinating Office dated November 06, 2018		
R-1	"The State of Utah supports USACE efforts to expedite and streamline the review and decisions for Section 408 requests that are similar in nature and have similar impacts to the USACE project and environment."	Thank you for your comment.
Email received from Michael Wright with the CVFPB on November 07, 2018		
S-1	"Section: Introduction, last sentence (page 1). Suggest adding 'or for removal of similar alterations.' At the end of the last sentence to be consistent with proposed Engineering Condition #18."	Removal of alterations or control of encroachments in the project right of way is an operations and maintenance activity that does not require Section 408 permission.

Comment Number	Summarized Comment or Question	USACE Response
S-2	"Section: Categorical Permission Alteration Descriptions, Agriculture and Landscaping, third paragraph (page 1). Per Categorical Permission (CP) requirement, orchards, flower gardens, vegetable gardens would not be permitted within 15 feet of the levee toes; this could imply that orchards would be allowed within bypasses (e.g. Yolo Bypass). California Code of Regulations Title 23, Division 1, Article 8, Section 131 (h) does not permit orchards within bypasses. Suggest clarifying that orchards would not be permitted within bypasses."	All Section 408 permission requests require a statement of no objection and review by the non-federal sponsor prior to submitting the request to USACE.
Letter received from the Sacramento Water Forum on November 08, 2018		
T-1	"Categorical Permission 8: Environmental Restoration (CP 8), as we understand CP 8 to not require a non-federal sponsor."	Per EC 1165-2-220, all alterations approved under the Categorical Permission would require requesters to obtain a statement of no objection and review by the non-federal sponsor prior to submitting the request to USACE. This clarifying language has been added to the Categorical Permission.
T-2	"We request a timeline, or such other clarification, as to how quickly USACE decisions will be for projects qualifying for Categorical Permissions, including those set forth in CP 8."	Under EC 1165-2-220, USACE is required to make a decision on a Section 408 request within 90 days of receiving all the information required to make a decision.
Email received from Lizel Allen, Salt Lake County Flood Control on November 08, 2018		

Comment Number	Summarized Comment or Question	USACE Response
U-1	“The second paragraph of 11. FIBER OPTIC AND DRY UTLITY PIPES states "All new fiber optic, electrical and other dry utility pipes must go up and over the levee design water surface elevation (DWSE)." This seems to conflict with the 14. HORIZONTAL DIRECIONAL DRILLING (HDD) section. The majority of our HDD permits are for fiber optic lines. Can new fiber optic lines comply with Section 14 instead of going up and over the DWSE as requested in Section 11?”	USACE clarified the Fiber Optic and Dry Utility Pipes alteration description to cover open trench installations. Any installation using HDD would be covered under the HDD alteration description.
Letter received from Julie Rentner, River Partners (along with CalTrout, American Rivers, Friends of the River) dated November 08, 2018		
V-1	Letter of support for the categorical permission.	Thank you for your comment.
Email from Laverne Bill, Cultural Resources Manager, Yocha Dehe Wintun Nation dated November 8, 2018		
W-1	Requested a few weeks extension to submit comments.	USACE returned email on November 9, extending the comment period to close of business on November 13, 2018. No further comments received.

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

Operations and Readiness Branch

PUBLIC NOTICE

CATEGORICAL PERMISSION FOR SECTION 408 REQUESTS U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT

PUBLIC NOTICE COMMENT PERIOD:
Begins: September 18, 2017
Ends: October 18, 2017

AUTHORITY: The authority to grant permission for temporary or permanent use, occupation or alteration of any U.S. Army Corps of Engineers (USACE) civil works project is contained in Section 14 of the Rivers and Harbors Act of 1899, as amended, codified at 33 U.S.C. 408 ("Section 408"). Section 408 authorizes the Secretary of the Army, on the recommendation of the Chief of Engineers, to grant permission for the alteration or occupation or use of a USACE project if the Secretary determines that the activity will not be injurious to the public interest and will not impair the usefulness of the project. The Secretary of Army's authority under Section 408 has been delegated to the USACE, Chief of Engineers. The USACE Chief of Engineers has further delegated the authority to the USACE, Directorate of Civil Works, Division and District Commanders, and supervisory Division Chiefs depending upon the nature of the activity.

INTRODUCTION: There are numerous USACE civil works projects within the boundaries of the South Pacific Division, Sacramento District. These projects have been federally authorized by the U.S. Congress and then turned over to a non-federal sponsor to operate and maintain. Projects may include flood risk reduction projects such as levees and channels located in both rural and urban areas. Each year the Sacramento District receives requests through the non-federal sponsors from private, public, tribal, and other federal entities (requesters) to alter USACE federally authorized civil works projects ("USACE projects") pursuant to Section 408.

When the Sacramento District receives a request to alter a USACE project, the district follows a review process outlined by Engineering Circular (EC) 1165-2-216, *Policy and Procedural Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408* (Attachment 1). To simplify the review process, EC 1165-2-216 states that USACE districts can develop categorical permissions to cover potential alterations that are similar in nature and that have similar impacts.

The Sacramento District receives numerous Section 408 requests for minor alterations to USACE projects each year; a total of 105 requests were received in 2015 and 107 requests were received in 2016. The majority of these requests are for relatively minor alterations of the levee or channel, such as installation of irrigation pipes, horizontal directional drilling for the placement of utility lines, and private recreational boat docks. Many of the project descriptions for proposed alterations are similar and the effects tend to be minor or negligible. However, the current review and approval process is time intensive and can take months. The need for the proposed action is to increase efficiencies in the review process of Section 408 requests for minor alterations to USACE federal projects.

The Sacramento District proposes to implement a categorical permission in order to create efficiencies in the review process for Section 408 requests for minor alterations to USACE projects within the civil works boundaries of the district.

ALTERNATIVES: The decision options are: 1) No Action Alternative: continue with the current process of reviewing and making decisions on Section 408 requests individually, as described in EC 1165-2-216, or 2) Preferred Alternative: approve a categorical permission to cover potential alterations that are similar in nature and have similar impacts.

SCOPE OF THE DECISION: The Sacramento District's area of responsibility covers a wide geographic area and includes portions of the states of Arizona, California, Colorado, Idaho, Nevada, Oregon, Utah, and Wyoming. The geographic scope of the decision to be made is limited to federal USACE projects under the responsibility of the Sacramento District. Federal projects within the Sacramento District are located in California, Colorado, Nevada, and Utah (Attachment 2). The decision would only apply to the Sacramento District and would not apply to any other USACE districts. The decision only applies to federal levees and channel modification projects and does not apply to any lake projects. The temporal scope of the decision to be made is for five years; after five years the decision would be reevaluated and may be renewed or revised, if appropriate.

PROPOSED CATEGORICAL PERMISSION: The proposed categorical permission would encompass a list of potential alterations that are similar in nature and have similar and minor impacts. If an environmental assessment (EA) or environmental impact statement (EIS) is needed for the National Environmental Policy Act (NEPA) documentation of a proposed alteration, then the proposed categorical permission would not apply and the Section 408 request would be reviewed and a decision made following the current process described in EC 1165-2-216.

In order for the categorical permission to apply, a Section 408 request must incorporate standard mitigation measures and best management practices into the project plan. Projects would be required to minimize disturbance to surrounding vegetation, return disturbed areas to pre-project conditions, remove spoils, control storm water runoff and erosion, and not exceed federal *de minimis* levels of criteria air pollutants or precursors.

The proposed categorical permission would encompass the following types of alterations:

1. **Agriculture and Landscaping:** A variety of standard agricultural activities may occur in the floodway. These activities may include, but are not limited to, orchard installation and cultivation, orchard removal, planting of row crops, or installation of temporary or permanent irrigation lines in the floodway. The total area of work per proposed alteration must not exceed 350 acres in size. The proposed categorical permission covers work in land previously used for agriculture (fallow fields, row crops, etc.) and does not cover type conversion of native habitat to cultivated land.
2. **Boat Docks:** New private recreational boat docks (and associated access) may be constructed and existing boat docks may be modified. The proposed categorical permission would cover landing structures, gangways, the floating boat dock structure, and debris booms associated with boat docks. The maximum boat dock size (including the gangway and the floating platform) covered under the categorical permission is 2000 square feet.

3. **Borings and Other Levee Explorations:** Multiple geotechnical or other exploratory borings may be conducted within the levee prism, adjacent to the levee toe, and/or in the floodway. A maximum of 25 borings per proposed alteration may be covered by this categorical permission. A variety of drilling methods may be used, including, but not limited to, cone penetration tests (CPTs) and geotechnical borings.
4. **Borrow Sites:** Borrow sites may be excavated in the floodway. Borrow sites authorized under this categorical permission may not exceed 5 acres in size and must be located at least 100 feet from the waterside or landside levee toes. The project area must be free of riparian habitat and woody vegetation. Non-woody vegetation may be cleared and grubbed to allow for the removal of clean material. The borrow site must be revegetated with native species or returned to the previous use after material is removed.
5. **Bridges:** The proposed categorical permission would cover alterations that include construction, replacement, modification, or removal of vehicle, pedestrian, or railroad bridges, or actions that are similar in nature. Modification or rehabilitation may occur on the approach roadways to the bridge. Bank protection (*e.g.* riprap) must be placed on the banks upstream and downstream of the bridge an appropriate distance.
6. **Buildings and Similar Structures:** This categorical permission covers construction or modification of buildings or other similar structures along with associated work, such as minor landscaping, in the floodway. The maximum area of construction must not exceed 2 acres. The buildings or similar structures may not be used for human habitation. Structures must be constructed in previously disturbed areas, this categorical permission does not cover conversion of native habitat.
7. **Ditches and Canals:** The proposed categorical permission would cover the construction or modification of ditches and canals in the floodway, as well as other similar actions. Ditches or canals may be native soil or lined with concrete or another durable material. Ditches and/or canals may be a maximum length of 1000 linear feet.
8. **Erosion Control and Bank Stabilization:** The proposed categorical permission would cover alterations that include bank stabilization and erosion control features, and/or actions that are similar in nature when the same activities are not considered to be operations and maintenance activities for federally authorized project. Rock slope protection (*e.g.* riprap) is the most common type of erosion control; however, other types of erosion control and bank stabilization methods and materials may be used. Asphalt (or other petroleum based materials) and floatable or refuse material must not be used as erosion control. Riprap must not be grouted into place. The maximum area of construction is 500 linear feet of bank and a maximum average of one cubic yard of fill per linear foot.
9. **Fences and Gates:** The proposed categorical permission would cover the installation, modification, and/or removal of fences and gates located on the levee or in the floodway. New fences and gates must not limit access or visibility for operation, inspection, maintenance, and flood-fighting. Fences must be constructed of see-through materials, such as chain link or barbed wire and fence posts must not penetrate more than 12 inches into the levee prism.
10. **Fish Screens:** Fish screens of a variety of designs, including drums, plates, cylindrical, cones, or other designs, may be installed on water intake pipes. Associated facilities, such as maintenance structures, walkways, and supports, may be installed as well. The maximum area of construction of fish screen support facilities must not exceed 1 acre.
11. **Pipes:** Both pressurized and non-pressurized pipes, including utility lines, may be installed up and over, through, or beneath the floodway and/or levees. Existing pipes may be abandoned, new pipes may be installed, or existing pipes may be modified. New culverts may be installed through the levee or in the floodway, and existing culverts

may be modified or removed. All gravity-flow culverts through the levee must have a flap gate on the waterside end and provisions for positive closure (slide gate or sluice gate) on the waterside, accessible from the crown of the levee. The proposed categorical permission does not apply to requests for new, long distance pipelines crossing multiple USACE navigation and flood risk reduction projects or crossing a single project in multiple locations

Depending on the type of pipe, construction may include associated structures, such as outfall structures, positive closure devices, (*i.e.* sluice gates, slide gates), electrical boxes, utility boxes, etc. Additionally, construction may include installation of small water supply or water drainage pump stations on either the landside or the waterside of a levee. Pumps are often installed on platforms and may include additional associated infrastructure such as a utility pole. A maximum of five utility poles associated with a pipe/pump structure may be allowed under this categorical permission.

Pipes may be installed using open cut methods (i.e. trenching) or horizontal directional drilling (HDD) methods. Using open cut methods, levee embankment material or material from the floodway is removed and then replaced according to design criteria. When HDD methods are used, a pit is excavated on either side of the floodway, and then pressure and drilling fluids are used to install the pipe beneath the levee embankment and/or channel.

The total area of drill pad work space disturbance, excluding staging and access areas, must not exceed 5 acres. Following construction, areas of disturbance must be restored to the pre-construction condition.

12. **Restoration:** The proposed categorical permission would cover a variety of restoration activities, including, but not limited to, planting of native vegetation (grasses, forbs, shrubs, and/or trees), placement of spawning gravels in active stream channels, removal of invasive species, and restoration and enhancement of ponds, stream channels, and/or wetlands. Stream and wetland restoration activities may include removal of sediment, installation, removal, or modification of small, non-federal water control structures (e.g., dikes and berms), modification of stream bed and/or banks, and/or removal of stream barriers, among other activities. The total area of restoration must not exceed 500 acres in size and the total length of channel restoration must not exceed 5000 linear feet.
13. **Retaining Walls:** This categorical permission would cover the construction of new retaining walls and the modification or removal of existing retaining walls. Retaining walls must be constructed of reinforced concrete or of equivalent durable materials.
14. **Seepage and Stability Berms:** Seepage and stability berms may be constructed on either the waterside or the landside levee slopes, as needed. The construction site may be cleared and grubbed of all vegetation; the total area of ground disturbance must not exceed 5 acres. New berms must be planted with native plants and/or grasses following construction.
15. **Stairs and Handrails:** New stairs may be installed or existing stairs may be modified on either the waterside or the landside levee slopes or in the floodway. Stairs must be made of concrete, rock, brick, or other sufficiently durable inorganic materials, no wood or wood-based products are allowed.
16. **Swimming Pools:** Swimming pools and associated support facilities (*e.g.* plumbing, pool patios) may be installed in the floodway. New swimming pools (both above-ground and in-ground) must not be built within 15 feet of a levee toe. The total area of

permanent disturbance associated with the proposed alteration must not exceed 2000 square feet.

17. **Trails/Roads and Access Ramps:** New trails/roads may be constructed, and existing trails/roads may be modified, on the levee crown; access ramps on the sides of the levee may also be constructed or modified. Gravel, asphalt, or concrete materials may be used in construction. The total area of construction for ramps must not exceed 2.5 acres in size and total length of trails/roads must not exceed 2 miles.
18. **Utility Poles:** A maximum of 1 acre of permanent disturbance may be associated with the installation, replacement, and/or removal of utility poles/towers from either the landside or the waterside of the levee system. Additionally, this categorical permission would cover aerial utility lines associated with utility poles. Tower installation may require the installation of concrete slabs and footings. Tower removal would require demolition of the existing tower and excavation of any existing foundation.
19. **Wells:** New wells to supply water for agricultural and other uses may be installed within the floodway. Construction may include a concrete platform (not to exceed 200 square feet in size) and a single power pole/guy wires.

ENVIRONMENTAL IMPACTS OF PROPOSED ACTION: The Sacramento District proposes to implement a categorical permission that, in accordance with EC 1165-2-216, would simplify the review process for Section 408 requests for minor alterations to USACE projects. The Sacramento District has determined that, in compliance with NEPA, a programmatic EA will be prepared. As the implementation of the categorical permission would not involve any on-the-ground work, there are no anticipated direct effects to environmental resources resulting from the programmatic decision at hand. Although the categorical permission would be for a variety of alteration types that individually could result in impacts to resources, it is important to note that the decision to be made on the categorical permission would not authorize any specific Section 408 requests or any on-the-ground work. If the proposed categorical permission is approved, future Section 408 requests would be individually reviewed to determine if they fit under the categorical permission.

Under the proposed categorical permission each individual Section 408 request would be evaluated on a case-by-case basis for compliance with all applicable environmental laws. Additionally, adequacy of the existing NEPA documentation (a programmatic EA for the categorical permission) would be verified for each individual Section 408 request. If the existing NEPA documentation is not adequate, a separate NEPA analysis would be conducted. Section 408 requests for alterations that are not described in the categorical permission (see descriptions above) or that do not adhere to the standard mitigation measures would be evaluated using the current review process for an individual request as described in EC 1165-2-216.

Although the decision on whether or not to implement the proposed categorical permission would not have direct impacts on resources, the types of alterations described under the proposed categorical permission have the potential to impact a number of different resources. Resources that could potentially be affected by these types of alterations include aesthetics, air quality, cultural resources, fish and wildlife, floodplains, invasive species, noise, recreation, threatened and endangered species, transportation/traffic, vegetation, water quality, and wetlands. It is expected that the effects associated with the types of alterations covered by the categorical permission described above would be minor or negligible. If a proposed alteration is determined to involve more than minor impacts or would not meet the parameters identified in the project

description, the categorical permission would not apply and a categorical exclusion, EA or EIS would be prepared, as appropriate.

Under the proposed categorical permission, the Sacramento District would continue to individually evaluate each Section 408 request on a case-by-case basis for potential effects to threatened and endangered species (and their designated critical habitat) listed under the federal Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq*.) and, as appropriate, conduct consultation pursuant to Section 7 of the ESA with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS). The Sacramento District would also continue to individually evaluate each Section 408 request for potential adverse effects to Essential Fish Habitat (EFH). If adverse effects to EFH are anticipated, the Sacramento District would consult with NMFS pursuant to the Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended (16 U.S.C. 1801 *et seq*.).

Under the proposed categorical permission the Sacramento District would continue to individually evaluate each Section 408 request on a case-by-case basis for the potential to affect cultural resources and, when there is the potential for effects, conduct consultation with the appropriate State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (54 U.S.C. 306108 *et seq*.). When a proposed alteration has the potential to affect cultural resources, the Sacramento District would coordinate, and consult as appropriate, with potentially interested Native American tribes.

PUBLIC INVOLVEMENT: The purpose of this notice is to solicit comments from the public; federal, state, and local agencies and officials; tribes; and other interested parties regarding the proposed Section 408 Categorical Permission. Comments received within 30 days of publication of this notice will be used in the evaluation of potential impacts of the proposed action on important resources.

SUBMITTING COMMENTS: Written comments, referencing “Section 408 Categorical Permission” must be submitted by email or mail to the office listed below on or before October 18, 2017.

Kaleigh Maze, Biologist
US Army Corps of Engineers, Sacramento District
1325 J Street, Room 1460
Sacramento, California 95814-2922

Email: Kaleigh.Maze@usace.army.mil

Attachments:

1) EC 1165-2-216
2) Sacramento District Boundary and USACE Federal Project Location Maps

Figure 1. Map showing the USACE Sacramento District civil works boundary.

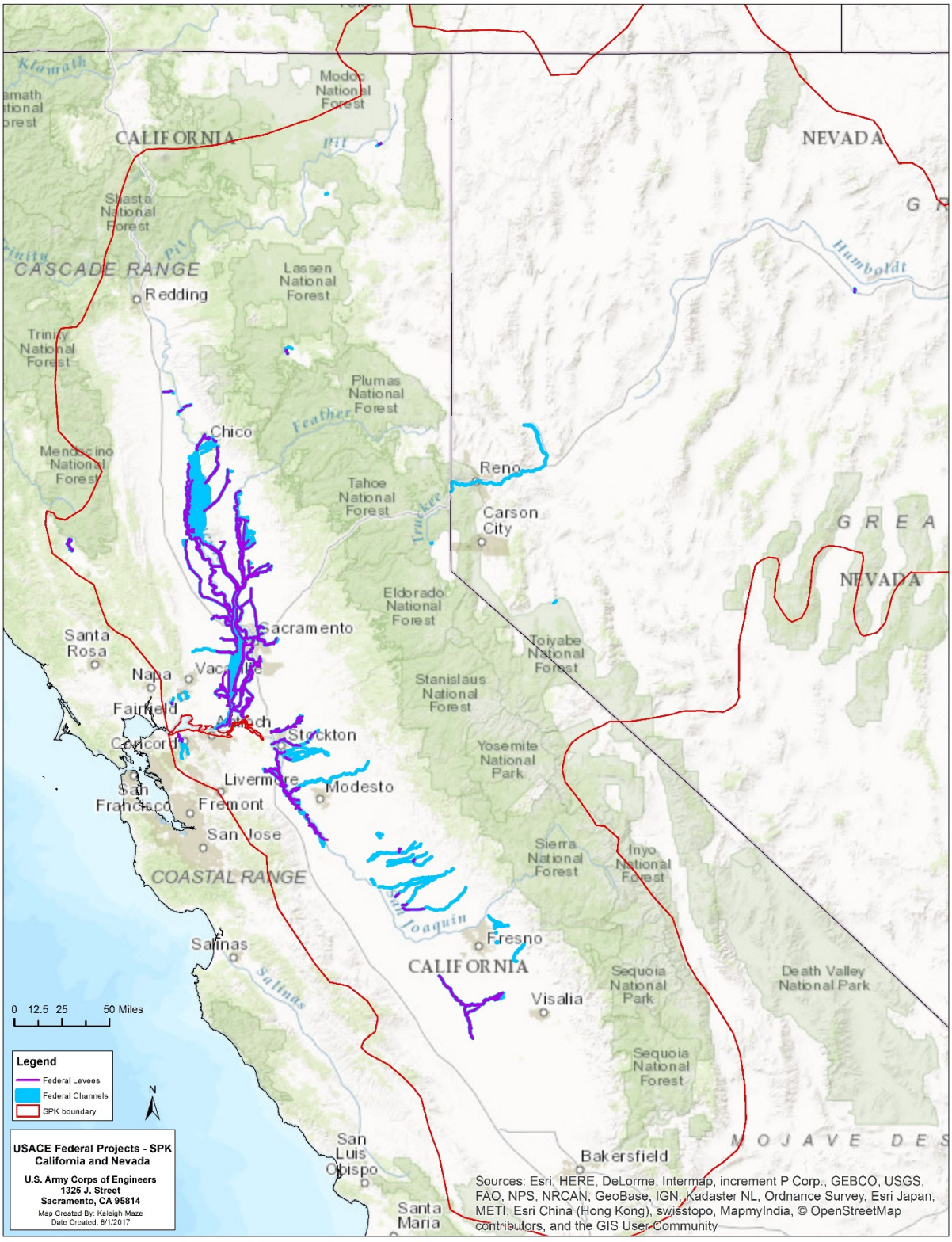

Figure 2. Map showing the USACE federal project levees and channels located within the Sacramento District in California and Nevada.

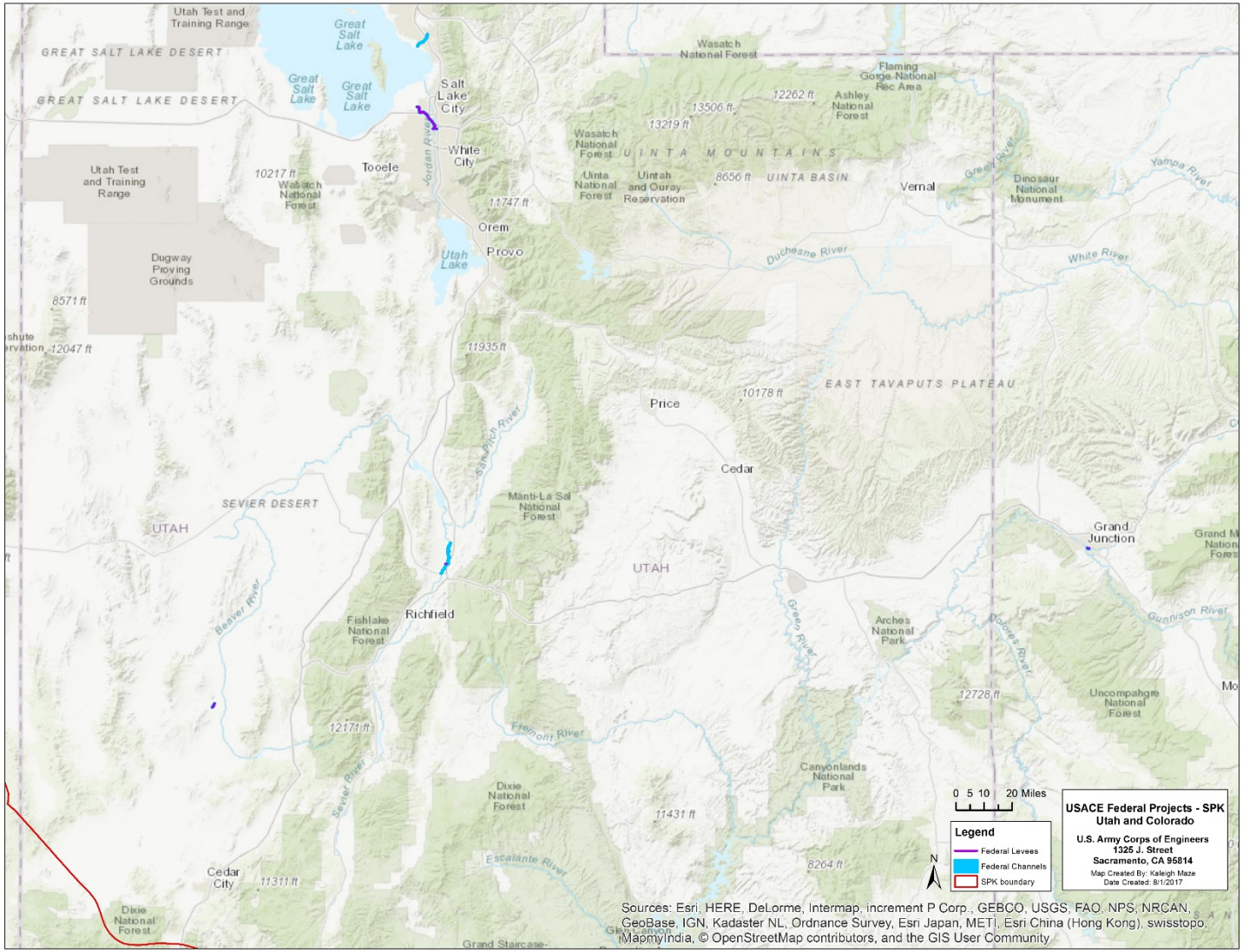

Figure 3. Map showing the USACE federal project levees and channels located within the Sacramento District in Utah and Colorado.

From: Maze, Kaleigh CIV USARMY CESPK (US)
To: Maze, Kaleigh CIV USARMY CESPK (US)
Subject: Public Notice: Categorical Permission for Section 408 Requests
Date: Friday, September 15, 2017 11:04:33 AM

Section 408 Public Notice

The U.S. Army Corps of Engineers Sacramento District has posted Public Notice Categorical Permission for Section 408 Requests to http://www.spk.usace.army.mil/Media/USACE-Project-Public-Notices/

There are numerous U.S. Army Corps of Engineers (USACE) civil works projects within the boundaries of the South Pacific Division, Sacramento District. These projects have been federally authorized by the U.S. Congress and then turned over to a non-federal sponsor to operate and maintain. Projects may include flood risk reduction projects such as levees and channels located in both rural and urban areas. USACE, pursuant to 33 U.S.C. 408 (Section 408), reviews requests to alter USACE federally authorized civil works projects. The Section 408 permission process is separate and independent of any Department of the Army Section 404 and Section 10 permitting actions.

In accordance with Engineering Circular (EC) 1165-2-216, the Sacramento District proposes to implement a categorical permission in order to create efficiencies in the review process for Section 408 requests for minor alterations to USACE projects within the civil works boundaries of the district. The proposed categorical permission would encompass a list of potential alterations that are similar in nature and have similar and minor impacts. EC 1165-2-216 guidance requires USACE to provide public notice of the activities covered by the categorical permission and to solicit appropriate information from the public to inform the environmental analysis and public interest determination.

For supporting documents and a more detailed description of the proposed categorical permission, please visit: http://www.spk.usace.army.mil/Media/USACE-Project-Public-Notices/

Written comments and/or a request for a paper copy of the notice may be submitted to Ms. Kaleigh Maze at U.S. Army Corps of Engineers, Operations and Readiness Branch, 1325 J Street, Sacramento, California, 95814-2922, or by email: Kaleigh.Maze@usace.army.mil.

Comments must be received by October 18, 2017.

From: Medin, Anmarie@Parks
To: Griffin, Seabrook J CIV USARMY CESPK (US)
Cc: Tippett, Koren@Parks; Maze, Kaleigh CIV USARMY CESPK (US)
Subject: [EXTERNAL] RE: Public Notice: Categorical Permission for Section 408 Requests
Date: Friday, September 15, 2017 11:50:32 AM

Ah, thanks for the quick response. This makes sense. We'll look forward to consulting individually as you indicate.

-----Original Message-----
From: Griffin, Seabrook J CIV USARMY CESPK (US) [mailto:S.Joe.Griffin@usace.army.mil]
Sent: Friday, September 15, 2017 11:48 AM
To: Medin, Anmarie@Parks <Anmarie.Medin@parks.ca.gov>
Cc: Tippett, Koren@Parks <Koren.Tippett@parks.ca.gov>; Maze, Kaleigh CIV USARMY CESPK (US) <Kaleigh.Maze@usace.army.mil>
Subject: RE: Public Notice: Categorical Permission for Section 408 Requests

Hi Anmarie:

I think that some of the categories of projects that are covered by this categorical permission might be interesting to explore in our PA as some of them might be candidates for an expedited process. For now though, we would continue to follow the Section 106 process as normal for all permissions.

Excerpt from the public notice:

" Under the proposed categorical permission the Sacramento District would continue to individually evaluate each Section 408 request on a case-by-case basis for the potential to affect cultural resources and, when there is the potential for effects, conduct consultation with the appropriate State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (54 U.S.C. 306108 et seq.). When a proposed alteration has the potential to affect cultural resources, the Sacramento District would coordinate, and consult as appropriate, with potentially interested Native American tribes."

(Blockedhttp://www.spk.usace.army.mil/Portals/12/documents/usace_project_public_notices/408_Documents/CatPerm_PublicNotice_FINAL.pdf?ver=2017-09-15-123316-940)

S. Joe Griffin, M.A., RPA
US Army Corps of Engineers
ph. 916-557-7897

BUILDING STRONG

-----Original Message-----
From: Medin, Anmarie@Parks [mailto:Anmarie.Medin@parks.ca.gov]
Sent: Friday, September 15, 2017 11:27 AM
To: Griffin, Seabrook J CIV USARMY CESPK (US) <S.Joe.Griffin@usace.army.mil>
Cc: Tippett, Koren@Parks <Koren.Tippett@parks.ca.gov>
Subject: [EXTERNAL] FW: Public Notice: Categorical Permission for Section 408 Requests

Joe -
This is an interesting email. Would you please be able to explain to us how Section 106 will factor into this approach?
Thanks,
Anmarie

-----Original Message-----
From: Maze, Kaleigh CIV USARMY CESPK (US) [mailto:Kaleigh.Maze@usace.army.mil]
Sent: Friday, September 15, 2017 11:05 AM
To: Maze, Kaleigh CIV USARMY CESPK (US) <Kaleigh.Maze@usace.army.mil>
Subject: Public Notice: Categorical Permission for Section 408 Requests

Section 408 Public Notice

The U.S. Army Corps of Engineers Sacramento District has posted Public Notice Categorical Permission for Section 408 Requests to Blockedhttp://www.spk.usace.army.mil/Media/USACE-Project-Public-Notices/

There are numerous U.S. Army Corps of Engineers (USACE) civil works projects within the boundaries of the South Pacific Division, Sacramento District. These projects have been federally authorized by the U.S. Congress and then turned over to a non-federal sponsor to operate and maintain. Projects may include flood risk reduction projects such as levees and channels located in both rural and urban areas. USACE, pursuant to 33 U.S.C. 408 (Section 408), reviews requests to alter USACE federally authorized civil works projects. The Section 408 permission

process is separate and independent of any Department of the Army Section 404 and Section 10 permitting actions.

In accordance with Engineering Circular (EC) 1165-2-216, the Sacramento District proposes to implement a categorical permission in order to create efficiencies in the review process for Section 408 requests for minor alterations to USACE projects within the civil works boundaries of the district. The proposed categorical permission would encompass a list of potential alterations that are similar in nature and have similar and minor impacts. EC 1165-2-216 guidance requires USACE to provide public notice of the activities covered by the categorical permission and to solicit appropriate information from the public to inform the environmental analysis and public interest determination.

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Written comments and/or a request for a paper copy of the notice may be submitted to Ms. Kaleigh Maze at U.S. Army Corps of Engineers, Operations and Readiness Branch, 1325 J Street, Sacramento, California, 95814-2922, or by email: Kaleigh.Maze@usace.army.mil.

Comments must be received by October 18, 2017.

From:	Luke, Brian J CIV CESPK CESPD (US)
To:	Wendy Fisher; Lee, Kevin C CIV (US); Maze, Kaleigh CIV USARMY CESPK (US)
Cc:	Meegan Nagy (MNagy@rd108.org)
Subject:	RE: Public Notice: Categorical Permission for Section 408 Requests - Might this apply to Knights Landing Boat Launch? (UNCLASSIFIED)
Date:	Friday, September 22, 2017 10:23:14 AM

Hi Wendy,

If your project fits under one of the described alterations in the public notice it would qualify, if not it would go through the current review process.

Brian

Brian J. Luke
Natural Resources Specialist
Flood Protection & Navigation Section
U.S. Army Corps of Engineers
1325 J. Street
Sacramento, CA 95814-2922
(916) 557-6629 office
(916) 557-7724 fax
brian.j.luke@usace.army.mil

-----Original Message-----
From: Wendy Fisher [mailto:WFisher@loainc.com]
Sent: Friday, September 22, 2017 10:13 AM
To: Lee, Kevin C CIV (US) <Kevin.C.Lee@usace.army.mil>; Maze, Kaleigh CIV USARMY CESPK (US) <Kaleigh.Maze@usace.army.mil>; Luke, Brian J CIV CESPK CESPD (US) <Brian.J.Luke@usace.army.mil>
Cc: Meegan Nagy (MNagy@rd108.org) <MNagy@rd108.org>
Subject: [EXTERNAL] RE: Public Notice: Categorical Permission for Section 408 Requests - Might this apply to Knights Landing Boat Launch? (UNCLASSIFIED)

Thanks Kevin and Brian. Im happy to answer any project-related questions by phone or email, if that would be helpful.

Wendy Fisher, B.S.
Senior Project Manager
Plant/Wetland Ecologist, Certified Arborist
Live Oak Associates, Inc.

Office: (559) 641-5658 | Mobile: (559) 696-6247

PO Box 2697
Oakhurst, California 93644

Blockedwww.loainc.com

-----Original Message-----

From: Lee, Kevin C CIV (US) [mailto:Kevin.C.Lee@usace.army.mil]
Sent: Friday, September 22, 2017 9:51 AM
To: Wendy Fisher; Maze, Kaleigh CIV USARMY CESPK (US); Luke, Brian J CIV CESPK CESPD (US)
Cc: Meegan Nagy (MNagy@rd108.org)
Subject: RE: Public Notice: Categorical Permission for Section 408 Requests - Might this apply to Knights Landing Boat Launch? (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Hi Wendy,

I'm going to defer this question to Brian Luke, he wrote the draft PA.

Kevin

-----Original Message-----
From: Wendy Fisher [mailto:WFisher@loainc.com]
Sent: Friday, September 15, 2017 11:37 AM
To: Lee, Kevin C CIV (US) <Kevin.C.Lee@usace.army.mil>
Cc: Meegan Nagy (MNagy@rd108.org) <MNagy@rd108.org>
Subject: [EXTERNAL] FW: Public Notice: Categorical Permission for Section 408 Requests - Might this apply to Knights Landing Boat Launch?

Hello Kevin. I just got this public notice, and wonder how this might affect the Section 408 permit we will be pursuing for the Knights Landing Boat Launch project. Might the project qualify for this categorical permission (more streamlined process)?

Thanks!

Wendy Fisher, B.S.
Senior Project Manager
Plant/Wetland Ecologist, Certified Arborist Live Oak Associates, Inc.

Office: (559) 641-5658 | Mobile: (559) 696-6247

PO Box 2697
Oakhurst, California 93644

BlockedBlockedwww.loainc.com

-----Original Message-----
From: Maze, Kaleigh CIV USARMY CESPK (US) [mailto:Kaleigh.Maze@usace.army.mil]
Sent: Friday, September 15, 2017 11:05 AM
To: Maze, Kaleigh CIV USARMY CESPK (US)
Subject: Public Notice: Categorical Permission for Section 408 Requests

Section 408 Public Notice

The U.S. Army Corps of Engineers Sacramento District has posted Public Notice Categorical Permission for Section 408 Requests to BlockedBlockedhttp://www.spk.usace.army.mil/Media/USACE-Project-Public-Notices/

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Written comments and/or a request for a paper copy of the notice may be submitted to Ms. Kaleigh Maze at U.S. Army Corps of Engineers, Operations and Readiness Branch, 1325 J Street, Sacramento, California, 95814-2922, or by email: Kaleigh.Maze@usace.army.mil.

Comments must be received by October 18, 2017.

CLASSIFICATION: UNCLASSIFIED

From: Barry ORegan
To: Maze, Kaleigh CIV USARMY CESPK (US)
Subject: [EXTERNAL] Re: Public Notice: Categorical Permission for Section 408 Requests
Date: Monday, September 18, 2017 7:26:23 AM

It was forwarded to me. Thanks!

Barry O'Regan
(209) 323-9864

> On Sep 18, 2017, at 7:13 AM, Maze, Kaleigh CIV USARMY CESPK (US) <Kaleigh.Maze@usace.army.mil> wrote:
>
> Good morning,
>
> Yes, of course. Did you receive the Public Notice email that I sent out last Friday? If not, please let me know and I can send it to you.
>
> Thanks,
>
> Kaleigh Maze
> Biologist
> Flood Protection and Navigation Section
> U.S. Army Corps of Engineers, Sacramento District
> 1325 J. Street
> Sacramento, CA 95814-2922
> (916) 557-6732
>
>
>
>

Barry O'Regan, P.E. CFM
Principal Engineer
1550 Harbor Blvd. Suite 212 West Sacramento CA 95691
916 403-5900 | fax: 916 403-5901
boregan@ksninc.com | Blockedhttps://www.ksninc.com

-----Original Message-----
> From: Barry ORegan [mailto:boregan@ksninc.com]
> Sent: Saturday, September 16, 2017 2:19 PM
> To: Maze, Kaleigh CIV USARMY CESPK (US) <Kaleigh.Maze@usace.army.mil>
> Subject: [EXTERNAL] Public Notice: Categorical Permission for Section 408 Requests
>
> Hi Kaleigh,
>
> Can you please add me to the mailing list for notifications on Categorical Permission for Section 408 Requests?
>
>
>

> Thanks
>
>
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>
>
>
>
>
>   Barry O'Regan, P.E. CFM
> Principal Engineer
>
> 1550 Harbor Blvd. Suite 212 West Sacramento CA 95691
> 916 403-5900 | fax: 916 403-5901 | mobile: 209 323-9864
> boregan@ksninc.com | BlockedBlockedhttps://www.ksninc.com
>
>

>

From:	Luke, Brian J CIV CESPK CESPD (US)
To:	Maze, Kaleigh CIV USARMY CESPK (US); Morgan, Joseph
Cc:	Larson, Ryan T CIV USARMY CESPK (US)
Subject:	RE: Public Notice: Categorical Permission for Section 408 Requests
Date:	Monday, October 02, 2017 12:56:39 PM

Hi Joseph,

We could meet at our office tomorrow morning before 1000 if that works for you. If not we can setup a conference call for a later date.

Thanks,
Brian

Brian J. Luke
Natural Resources Specialist
Flood Protection & Navigation Section
U.S. Army Corps of Engineers
1325 J. Street
Sacramento, CA 95814-2922
(916) 557-6629 office
(916) 557-7724 fax
brian.j.luke@usace.army.mil

-----Original Message-----
From: Maze, Kaleigh CIV USARMY CESPK (US)
Sent: Monday, October 02, 2017 12:17 PM
To: Morgan, Joseph <Morgan.Joseph@epa.gov>
Cc: Luke, Brian J CIV CESPK CESPD (US) <Brian.J.Luke@usace.army.mil>
Subject: RE: Public Notice: Categorical Permission for Section 408 Requests

Good afternoon,

Thanks for contacting me about the proposed categorical permission. I would love to meet and discuss this; however, I am actually deployed to Florida helping with Hurricane Irma relief efforts. I am not sure when I will be returning to Sacramento so I will forward your question to my colleague Brian Luke. Brian is CC'ed on this email and his contact info is below:

Brian J. Luke
Natural Resources Specialist
Flood Protection & Navigation Section
U.S. Army Corps of Engineers
1325 J. Street
Sacramento, CA 95814-2922
(916) 557-6629

Regards,
Kaleigh

Kaleigh Maze
Biologist
Flood Protection and Navigation Section
U.S. Army Corps of Engineers, Sacramento District
1325 J. Street

Sacramento, CA 95814-2922
(916) 557-6732

-----Original Message-----
From: Morgan, Joseph [mailto:Morgan.Joseph@epa.gov]
Sent: Thursday, September 28, 2017 12:07 PM
To: Maze, Kaleigh CIV USARMY CESPK (US) <Kaleigh.Maze@usace.army.mil>
Subject: [EXTERNAL] RE: Public Notice: Categorical Permission for Section 408 Requests

Hi Kaleigh,

Do you have some time (20-30 minutes) in the next 1-2 weeks to discuss the proposed categorical permissions? I will actually be in Sacramento next Tuesday for an afternoon meeting and could meet in person that morning. Otherwise I am available to talk on Monday and Wednesday of next week, and Tuesday through Friday on the week of October 9th.

I don't anticipate having any major comments but would just like to discuss how the acreages and categories of activities were arrived at. I understand that these only cover Section 408 permissions and not Clean Water Act-regulated activities, but we do have some questions as to how they may influence non-404-regulated impacts on waters.

Thank you,
Joe

--
Joseph A. Morgan
Life Scientist
Wetlands Section
EPA Region IX - Water Division
(415)972-3309
morgan.joseph@epa.gov

-----Original Message-----
From: Maze, Kaleigh CIV USARMY CESPK (US) [mailto:Kaleigh.Maze@usace.army.mil]
Sent: Friday, September 15, 2017 11:05 AM
To: Maze, Kaleigh CIV USARMY CESPK (US) <Kaleigh.Maze@usace.army.mil>
Subject: Public Notice: Categorical Permission for Section 408 Requests

Section 408 Public Notice

The U.S. Army Corps of Engineers Sacramento District has posted Public Notice Categorical Permission for Section 408 Requests to Blockedhttp://www.spk.usace.army.mil/Media/USACE-Project-Public-Notices/

There are numerous U.S. Army Corps of Engineers (USACE) civil works projects within the boundaries of the South Pacific Division, Sacramento District. These projects have been federally authorized by the U.S. Congress and then turned over to a non-federal sponsor to operate and maintain. Projects may include flood risk reduction projects such as levees and channels located in both rural and urban areas. USACE, pursuant to 33 U.S.C. 408 (Section 408), reviews requests to alter USACE federally authorized civil works projects. The Section 408 permission process is separate and independent of any Department of the Army Section 404 and Section 10 permitting actions.

In accordance with Engineering Circular (EC) 1165-2-216, the Sacramento District proposes to implement a categorical permission in order to create efficiencies in the review process for Section 408 requests for minor alterations to USACE projects within the civil works boundaries of the district. The proposed categorical permission would encompass a list of potential alterations that are similar in nature and have similar and minor

impacts. EC 1165-2-216 guidance requires USACE to provide public notice of the activities covered by the categorical permission and to solicit appropriate information from the public to inform the environmental analysis and public interest determination.

For supporting documents and a more detailed description of the proposed categorical permission, please visit: Blockedhttp://www.spk.usace.army.mil/Media/USACE-Project-Public-Notices/

Written comments and/or a request for a paper copy of the notice may be submitted to Ms. Kaleigh Maze at U.S. Army Corps of Engineers, Operations and Readiness Branch, 1325 J Street, Sacramento, California, 95814-2922, or by email: Kaleigh.Maze@usace.army.mil.

Comments must be received by October 18, 2017.

From: Maze, Kaleigh CIV USARMY CESPK (US)
To: "McGrath, Eric@DWR"
Cc: Deal, Scott@DWR; List, Mark@DWR; Brian J SPK Luke (Brian.J.Luke@usace.army.mil)
Subject: RE: CA Dept. of Water Resources comments on 408 Cat. Perm.
Date: Tuesday, October 17, 2017 8:33:00 AM

Good morning,

Thank you for your response to the Section 408 Categorical Permission Public Notice. In answer to your questions:

1. Yes, similarly to the Nationwide Permits, the alterations described under the proposed categorical permission could be stacked. A single proposed project could combine multiple categories of alterations (for example, restoration with irrigation lines).

2. We are in the final stages of editing a biological assessment template. This will be distributed, approximately by October 20, to non-federal sponsors and will be made available to 408 requesters.

3. We are in the process of preparing a Section 106 programmatic agreement for Section 408 requests and have engaged the pertinent SHPOs and tribes as part of that process.

4. For item #8, Erosion Control and Bank Stabilization, we removed the limit on the amount of fill per linear foot.

Thank you for your additional comments, we will consider them throughout the planning process. If you have any additional comments or questions please feel free to contact me.

Respectfully,

Kaleigh Maze
Biologist
Flood Protection and Navigation Section
U.S. Army Corps of Engineers, Sacramento District
1325 J. Street
Sacramento, CA 95814-2922
(916) 557-6732

-----Original Message-----
From: McGrath, Eric@DWR [mailto:Eric.McGrath@water.ca.gov]
Sent: Wednesday, October 11, 2017 1:36 PM
To: Maze, Kaleigh CIV USARMY CESPK (US) <Kaleigh.Maze@usace.army.mil>
Cc: Deal, Scott@DWR <Scott.Deal@water.ca.gov>; List, Mark@DWR <Mark.List@water.ca.gov>
Subject: [EXTERNAL] CA Dept. of Water Resources comments on 408 Cat. Perm.

The California Department of Water Resources, Division of Flood Maintenance, is providing the comments and questions below regarding the Public Notice for Categorical Permission for Section 408 Requests.

* Can these proposed categorical permissions be stacked like Nationwide Permits for a project. An example would be 1) Agriculture and Landscaping which allows irrigation line in the floodplain be combined with 12) Restoration where irrigation of native plantings would be needed? This would help DWR's understanding of how to best use these categorical permissions in implementing projects under the Central Valley Flood Protection Plan (CVFPP), such as restoration activities within the flood system.

* For Endangered Species Act compliance with section 7 consultation, either a biological assessment template

or a programmatic biological assessment would provide even more efficient processing and review of these categorical permissions.

* For historical/cultural and tribal assessment , having a programmatic agreements in place with the State Historical Preservation Officer and tribes would make the categorical permission process even more efficient.

* For item #8, Erosion Control and Bank Stabilization – The limit of one cubic yard of fill per linear foot greatly restricts the use of these categorical permissions. The volume of fill will vary greatly depending upon slope length. For example, if repairing an erosion that extends up the slope 20 feet, using a 2 foot thickness for the riprap blanket, equals 1.5 cubic yards/linear foot. Suggest removing the volume limit or increasing it to 3 cy/ft.

* For item #9, Fences and Gates – the limit of posts not penetrating more than 12-inches is too restricting. Gates across levees to prevent public access (as required by O&M manuals) require a deeper foundation. Suggest allowing penetrations to at least the design water surface (penetrations through the freeboard).

* For item #11, Pipes – Paragraph 3 states that when using open cut method, the levee material is replaced according to design criteria. What design criteria is this based upon? If the existing levee is constructed of a material that is no longer suitable according to current regulations, then only that small segment that is excavated will meet current regulation. The material change in this wedge of levee may not shrink/swell the same as the existing soil and may create unforeseen issues.

If you have any questions or comments, please contact Eric McGrath at eric.mcgrath@water.ca.gov <mailto:eric.mcgrath@water.ca.gov> or (916) 574-2243. Thank you.

Eric McGrath, PE

Senior Engineer - Water Resources

Division of Flood Management

Office of Flood Maintenance

Chief - System Integrity C

(916) 574-2243

RECLAMATION DISTRICT NO. 17
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Telephone: (209) 465-5883
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TRUSTEES

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Michael Robinson
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SECRETARY AND COUNSEL
Dante John Nomellini
ENGINEER
Christopher H. Neudeck
Kjeldsen, Sinnock & Neudeck, Inc.

October 17, 2017

Via email Kaleigh.Maze@usace.army.mil
Kaleigh Maze, Biologist
USACE, Sacramento District
1325 J Street, Room 1460
Sacramento, California 95814-2922

Re: Section 408 Categorical Permission

We appreciate the opportunity to comment and support the Sacramento District's effort to reduce the delay and huge cost imposed on Local Maintaining Agency (LMA) efforts to maintain and improve the project levees. It is critical not to impair the usefulness of the project levees, to promptly repair known deficiencies and to facilitate improvement to meet more conservative engineering standards and increased physical threats.

It is not clear from the notice how the proposed categorical permissions will reduce the current delays and costs of 408 permitting, but we are supportive of any permit streamlining that can be achieved.

Removal, repair or replacement of penetrations through the levees should not require any permit process so long as inspected by the LMA engineer and reported to the CVFPB. It doesn't make any sense to delay or obstruct such corrective actions, particularly in those situations in which the LMA is undertaking such actions pursuant to a federal project O&M manual. Similarly actions to

correct seepage deficiencies and improve the levee integrity with work outside the waterway should be expedited and encouraged and covered by a categorical permission. Widening and raising the crown, flattening the landside slopes, constructing landside toe and seepage berms, installing toe drains and the like should be allowed if meeting minimal engineering standards set forth in the O&M manual. Even sheet piles and seepage cut off walls installed according to generally accepted engineering standards should be considered.

When it comes to project levees, the type of environmental review or compliance should not be relevant as to whether or not there is impairment of the usefulness of the project or whether the work is injurious to the public interest as a matter of Section 408. The levees were authorized to protect areas against flooding. Private and public actions have relied upon such protection, and to delay or obstruct efforts to provide such protection as injurious to the public interest is at the very least unjustifiable. The mitigation, measures and minimization of impacts to the environment will be addressed in any event, particularly in those instances in which such measures were recommended by an EIA or EA/FONSI in the first instance.

Reducing cost and delay in the permitting process is welcome for work that is necessary to maintain and improve levees. Nonetheless, some of the items proposed for Categorical Permission could be very damaging to levees. For example, including borrow site excavations only 100 feet from the waterside or landside levee toes and below ground swimming pools within 15 feet is not a good idea. Without measures to comply with the USACE seepage criteria it would appear to be irresponsible. Site location is critical. In our area we would be gravely concerned. Where HDD entry or exit sites are below the water levels in the waterway, particularly during the construction period the entry and exit points should be located well back from the levee or adequately leveed or otherwise contained. These Categorical permissions particularly need some engineering conditions that are relevant to the particular categorical permission at issue. Levee crown raising and widening to the landside, flattening the landside slopes, constructing landside toe and seepage berms, installing toe drains and the like should be added.

The proposed Categorical permissions' limitations as to size, including lineal footage, square footage, acreage etc. appear to be arbitrary. The focus should be on whether the work impairs the usefulness of the project levees or is injurious to the public interest in accordance with Section 408.

Finally, the Sacramento District should clarify how the District intends to document that a Categorical permission applies to a particular activity when a proposed action is covered by a Categorical permission.

Dante John Nomellini
Secretary and Counsel

CALIFORNIA
High-Speed Rail Authority

October 17, 2017

Ms. Kaleigh Maze
US Army Corps of Engineers, Sacramento District
1325 J Street, Room 1460
Sacramento, CA 95814-2922
Email: Karleigh.Maze@usace.army.mil

RE: California High Speed Rail Authority Comments on September 18, 2017 Proposed Categorical Permission for Section 408 Requests, U.S. Army Corps of Engineers, Sacramento District

Dear Ms. Maze:

The California High-Speed Rail Authority (Authority) provides the following comments on the U. S. Army Corps of Engineers (Corps) Proposed Categorical Permission for Section 408 Requests U.S. Army Corps of Engineers, Sacramento District. The Authority generally supports the Corps' proposal to provide the categorical permissions since they will serve to expedite review of requests for permissions to alter Corps civil works projects. Further, we urge the Corps to develop specific standard mitigation measures and best management practices (BMPs) that are easily understood and that are commensurate with the minor impacts caused by the proposed alteration.

The Authority, an agency of the State of California, is responsible for planning, designing, building and operating California's statewide high-speed rail program (Program). High-speed rail will provide service between San Francisco to the Los Angeles/Anaheim area in under three hours, and will eventually extend to Sacramento and San Diego. At full build-out, the Program will cover approximately 800 miles. The Program is comprised of ten separate project sections (Section), five of which are either entirely or partially within the Sacramento District's boundary and may directly benefit from the proposed categorical permission: (1) San Jose to Merced project section; (2) Merced to Fresno project section, including the Central Valley Wye that serves as the junction between the Central Valley and Bay Area); (3) Merced to Sacramento project section; (4) Fresno to Bakersfield project section; (5) Bakersfield to Palmdale project section; and (6) Palmdale to Burbank project section.

Between 2001 and 2012, the Federal Railroad Administration (FRA), the federal oversight agency for the Program, and the Authority scoped, prepared and approved a tier-one programmatic Environmental Impact Statement and Environmental Impact Report (EIS/EIR) in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) for the Program. The Corps concurred with these programmatic decisions under the federal Clean Water Act (CWA). As a means at the project (tier-two) level to cooperatively align NEPA, CEQA, and CWA Section-specific alternatives development, the Authority, FRA, USEPA and the Corps entered into a Memorandum of Understanding in 2010 (MOU). The MOU provides a cooperative and interactive process for the Authority, FRA, USEPA and the Corps to analyze and review potential alternative Section alignments and determine the Least Environmentally Damaging Practical Alternative (LEDPA)

under CWA Guidelines and to conduct an early review with the Corps regarding potential project elements that might require 408 permissions. The Authority is currently working with Corps staff regarding a number of required 408 permissions in its Fresno to Bakersfield project section. Additionally, it is anticipated that the Authority will need to obtain 408 permissions with respect to other project sections. If adopted, the proposed Categorical Permission for Section 408 Requests would likely positively affect the Authority's project delivery schedule.

The Authority supports the proposed categorical permission since it may lead to project permit streamlining and assist in expediting project delivery. In particular, of interest to the Authority is the "Bridge" category which includes alternations due to construction, replacement, and modification of railroad bridges (Proposed Category No. 5). Additionally, many of the other categories described may benefit project delivery, including "Borings and Other Levee Explorations" (No. 3), "Borrow Sites" (No. 4), "Ditches and Canals" (No. 7), "Pipes" (No.11), "Restoration" (No. 12), "Trails Road and Access Ramps" (No. 17), and "Utility Poles" (No. 18).

The Authority is ready to assist the Corps in its development of the programmatic Environmental Assessment and development of required mitigation measures and BMPs for these proposed categories. Please contact me at (916) 403-6934 or via email at mark.mcloughlin@hsr.ca.gov, if you have questions, or wish to coordinate.

Sincerely,

Mark A. McLoughlin
Director of Environmental Services
California High-Speed Rail Authority

October 18, 2017

Kaleigh Maze, Biologist
US Army Corps of Engineers, Sacramento District
1325 J Street, Room 1460
Sacramento, California 95814-2922

WATER FORUM
Sacramento City-County Office of Metropolitan Water Planning

Subject: Section 408 Categorical Permission

Ms. Maze,

This letter is on behalf of the Sacramento Water Forum, a diverse group of business leaders, water managers, local government leaders and environmental groups from the greater Sacramento Region. The Water Forum was established in 1993 with the co-equal goals of protecting the fishery and recreational resources of the lower American River and meeting the water needs of the Sacramento area. Water Forum staff and consultants have been working cooperatively with State and Federal fish trustee agencies and the U.S. Bureau of Reclamation to monitor conditions in the river and develop long term management strategies for responding to the declining fishery on the lower American River.

Critically, the Water Forum helps to coordinate activities to protect endangered salmonid species in the lower American River in significant part to ensure that Folsom and Nimbus Dam projects may operate without jeopardizing these species [WCR-2015-2703]. As part of this work, supporting the operations of Bureau of Reclamation and Army Corps projects, the Water Forum periodically conducts habitat restoration work on the river on their behalf.

The Water Forum's Role and the Restoration Project Challenge

The Water Forum is grateful for the opportunity to comment on the Sacramento District's proposed "Categorical Permission for Section 408 Requests" at the Sacramento District office of USACE. The Water Forum agrees with the District Office that permissions are an important way to have projects safely move through the 408 process.

We regret that this years' restoration projects were stymied because the Corps proposed – for the first time, and in a significant departure from past practice – that a Section 408 permission was required, and then informed us that it lacked funds to process a permission. Avoiding this unfortunate outcome in future years is critical to avoid potential jeopardy to covered species, and to ensure smooth operation of federal projects.

Our projects are a successful component of dam operations. Through these projects, 40 acres of habitat has been created, producing benefits for Chinook salmon and Steelhead. These projects are part of The Central Valley Project Improvement Act (CVPIA section 3406 (b)(13)) which mandates an ongoing program for habitat restoration and improvement for salmonids (Chinook salmon and steelhead) in the lower American River. This program helps satisfy section 7(a)(2) of the ESA for Reclamation.

The Categorical Permission that the Corps has proposed may aid in speeding projects in future years. However, the Categorical Permission process is still rife with inefficiencies and more cumbersome than need be. The public notice is unclear as to what exactly is being exempted. As we understand it the USACE would send federal agencies to apply to a non-federal sponsor and in our case the Central Valley Flood Protection Board (CVFPB) (whose regulations do not apply to federal agencies) has been designated as that non-federal sponsor. As proposed, the process appears to include requirements for independent project evaluations. These requirements reduce the ability to incorporate adaptive management into project designs. The intervening time would be needed to conform to the review process while incorporating learning into new project designs. Until now, there has been time for a feedback loop in a single year in order to incorporate monitoring results from a project completed in September, monitored over the winter for effectiveness, and then incorporate monitoring results into a design completed the following summer for implementation in August-September of the next year.

If the Categorical Permission is the process the Corps ultimately uses, restoration projects may, therefore, still not move forward with the speed or completeness needed to avoid jeopardy and maintain and improve the status of species in the river. We are likely to wind up on a two-year cycle, rather than a one-year cycle.

Thus, though we support the Categorical Permission for Restoration, more remains to be done. We therefore propose an additional approach that may better support our ongoing partnership: Recognizing that the restoration projects are a part of federal project operations and mitigation and need not, therefore, undergo a separate 408 review (or, at most, one that is extremely streamlined).

The Corps Should Recognize that a State-Level Review Prior to Categorical Permission Is Not Needed for Federal Operations Projects, Including Restoration Work Conducted by the Water Forum

Section 408 review processes, according to Engineering Circular 1165-2-216, are to be "tailored at the district level to the appropriate level of detail." We suggest that members of the federal family, especially those working jointly with the Corps in water management, be determined to be acting in the "public interest" per Section 408, with no need for further review of their operations efforts, on the basis that they have mutual goals, objectives, and regulatory requirements. Federal agencies should be seen as partners in the 408 process, not as applicants, and therefore not be required to first apply to a state agency (here, the CVFPB).

Specifically, under the Section 408 process as operated by the Sacramento District projects could be delayed for years, as they move through the CVFPB process. Delayed projects result in loss of project funding in the short term and long term with continued inability to implement annual habitat improvements as mandated by the CVPIA.

This second layer of state-level review that may inadvertently be required even if a categorical permission is in place is a waste of taxpayer dollars. Federal agencies which are charged with maintaining and operating dams should also be trusted to coordinate exclusively with other federal agencies. Forcing these partner federal agencies to involve state agencies, such as the CVFPB, adds no value and creates a burden for all parties.

Reclamation partnered with USACE through the Joint Federal Project (JFP) and as we understand it this resulted in the entire lower American River being newly subjected to Section 408 permitting. In this partnership, Reclamation proved themselves capable of collaborative work and thoughtful analysis in flood control. Reclamation projects should not be seen differently below the dam; instead they should be viewed as an extension of the thoughtful process agreed on as part of the JFP. Reclamation is charged with operating and maintaining Folsom and Nimbus dams, flood protection releases, and mitigation, protection, and restoration of fish and wildlife. This mitigation includes the restoration projects the Water Forum designs and builds to support the JFP. Reclamation's habitat projects are often designed to be flood neutral.

The JFP did not fundamentally change Reclamation's role in the region; rather it created a more robust way to handle floods. Using this infrastructure and operational change to create needless regulatory requirements which are inconsistent with long standing past practice does not further protect the Sacramento region from flooding, but wastes time and public funds.

We therefore propose that, via modifications to the Categorical Permission or another means, that the Corps make clear that restoration projects commissioned as part of JFP operations and mitigation do not require further state-level review, or an extended Section 408 review process, and are inherently in the public interest, as they serve the purposes of the JFP and the Endangered Species Act.

Alternately, if the Corps is unable simply to recognize that the Section 408 process is not appropriate here, it should go further to streamline the process. This category of projects should be subject to a review process, tailored as allowed by EC 1165-2-216, to allow for their swift implementation. At a minimum the process should be restricted to federal review of projects and designed to ensure projects can be completed annually, consistent with habitat and operational needs.

This approach is consistent with the Corps' obligations to administer Section 408 in the public interest, to account for Endangered Species Act obligations, and to avoid "unnecessary regulatory controls," especially when other federal agencies are involved. (33 C.F.R. § 320.1(a)(3))

Please do not hesitate to contact me if you would like access to our data and observations.

Thank you for your consideration.

Sincerely,

Lilly Allen
Staff Scientist
Water Forum

Cc:

Mike Healey / CDFW
Colin Purdy / CDFW
Rob Titus / CDFW
Maria Rea / NMFS
Gary Sprague / NMFS
Ruth Goodfield / NMFS
Garwin Yip / NMFS
Jessica Andrieux / USBR
John Hannon / USBR
Drew Lessard / USBR
Tom Gohring / Water Forum

Anne M. Jackson
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October 18, 2017

Kaleigh Maze, Biologist

US Army Corps of Engineers, Sacramento District
1325 J Street, Room 1460
Sacramento, California 95814-2922

SUBJECT: Proposed Categorical Permissions for Section 408 Requests – U.S. Army Corps of Engineers, Sacramento District

Dear Ms. Maze:

Thank you for the opportunity to comment on the Proposed Categorical Permissions for Section 408 Requests. This letter provides PG&E's recommendations on the U.S. Army Corps of Engineers (USACE) Section 408 Requests process in general, and the proposed categorical permissions for "Utility Poles" and "Pipe" alterations in particular.

Pacific Gas and Electric Company (PG&E) is one of the largest combined natural gas and electric utilities in the United States, providing power to 16 million people in California. PG&E operates and maintains 4,549 crossing of gas and electric transmission and distribution lines with ancillary facilities that traverse USACE civil works projects. Our Section 408 Requests are for relatively minor alterations of levees or channels and include work associated with PG&E controlled gas (Pipe) and electric (Utility Poles) facilities. Currently, we submit approximately seven Section 408 requests annually, and estimate submitting another seven in 2018. The current review and approval process period is between 6 to 12 months.

PG&E applauds the USACE Sacramento District and staff in its effort to increase efficiencies and reduce processing timelines in the current Section 408 Requests review process for minor alterations to USACE federal projects. We believe that this proposal for categorical permissions, particularly for minor maintenance and construction associated "Pipe" and "Utility Poles" will enable us to perform our work more efficiently and effectively. Our recommendations are focused to ensure that these particular permissions accurately capture the types of activities and technologies associated with minor alterations associated with "Pipes" and "Utility Poles." We have also included comments to ensure there is consistent interpretation and application of the Proposed Categorical Permissions amongst staff and requestors.

SPECIFIC COMMENTS

Comment 1- Proposed categorical permissions – (11.) Pipe Alterations:

The current proposed language includes descriptions of some methods used for pipeline construction. We recommend that the permission language be expanded to include all pipeline construction and maintenance activities that might otherwise trigger the need for a Section 408 authorization. In addition, we recommend that the methods used to construct and maintain pipelines allow for use of best technologies available and include examples of additional technologies associated with pipeline maintenance and construction. Further, we recommend that new pipeline construction be covered under the categorical permission if permanent impacts are a maximum of 1 acre, mirroring the proposal under the "poles" category. Last, for consistency, we recommend that the limit on utility poles associated with pump installations be a limit on permanent impacts, not on the number of poles.

Recommended edits **(bold)**:

Pipes: Both pressurized and non-pressurized pipes, including utility lines, may be installed up and over, through, or beneath the floodway and/or levees. Existing pipes may be abandoned, new pipes may be installed, or existing pipes may be modified. New culverts may be installed through a levee or in a floodway that is part of a federal project, and existing culverts may be modified or removed. All gravity-flow culverts through the levee must have a flap gate on the waterside end and provisions for positive closure (slide gate or sluice gate) on the waterside, accessible from the crown of the levee. The proposed categorical permission **applies to requests for new, long distance pipelines crossing multiple USACE navigation and flood risk reduction projects or crossing a single project in multiple locations, provided permanent impacts within the federal projects areas are subject to a maximum limit of one acre.**

Depending on the type of pipe, construction may include associated structures, such as outfall structures, positive closure devices, (*i.e.* sluice gates, slide gates), electrical boxes, utility boxes, etc. Additionally, construction may include installation of small water supply or water drainage pump stations on either the landside or the waterside of a levee. Pumps are often installed on platforms and may include additional associated infrastructure such as a utility pole. **Utility poles associated with the installation of a pump are subject to a maximum limit of one acre permanent impact.**

Pipes may be **accessed or** installed using **best available technology to meet industry standards. Such methods include but are not limited to** open cut methods (i.e. trenching)**,** horizontal directional drilling (HDD) methods**, jack and bore, geotechnical boring and potholing.** Using open cut methods, levee embankment material or material from the floodway is removed and then replaced according to design criteria. When HDD methods are used, a pit is excavated on either side of the floodway, and then pressure and drilling fluids are used to install the pipe beneath the levee embankment and/or channel. **Jack and bore involves construction of two shafts down to the depth of the pipeline. A horizontal boring is made connecting one pit to the other without disturbing the surface between the two shafts. Geotechnical boring is a technique used to obtain information on the physical properties of soil and rock in the project area and involves vertical boring of varying diameters and depths. Potholing is performed to confirm the depth of other structures and utilities. This is often done with a vacuum truck or digging a small hole using an excavator when the utility is deep or has an odd structure or shape that makes the use of vacuum excavation difficult.**

The total area of drill pad work space disturbance, excluding staging and access areas, must not exceed 5 acres. Following construction, areas of disturbance must be restored to the pre-construction condition.

Comment 2 – Clarification of Section 408/USACE Jurisdiction – In order to ensure consistent interpretation of the USACE's jurisdiction for alterations within project boundaries, we recommend that the specific policy siting, (6c), from the circular 1165-2-216 Policy and Procedural Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects pursuant to 33 USC

Pacific Gas and Electric Company
77 Beale Street
San Francisco, CA 94105

Section 408, be included in the final approved categorical permission. This language reads, "This Engineering Circular (EC) only applies to alternatives proposed within the lands and real estate interests identified and acquired for the USACE project and to lands available for USACE projects under the navigable servitude." We understand this language to limit Section 408 jurisdiction and the corresponding need for a Categorical Permission to those lands and real estate interests identified and acquired for the USACE civil works project or those subject to navigational servitude. For example, a Section 408 authorization would not be required for lands within a general floodway or floodplain unless the area is clearly part of the federal project as indicated by a floodway easement or some other real estate interest by USACE or a navigational servitude.

Thank you for the opportunity to comment and for your consideration of our concerns and recommended revisions. PG&E looks forward to working with the USACE and staff to develop these categorical permissions to help ensure they are workable, consistently applied throughout the district, and protective of the environment. Should you have questions, please contact me at (415) 973-6523.

Sincerely,

Anne M. Jackson

Anne M. Jackson
Environmental Policy, Principal

cc: Ryan Larson – 408 District Coordinator, USACE - Sacramento District
Kim Leonard – District Approved 408, USACE - Sacramento District
Jon Wilcox – Manager, Environmental Management, PG&E
Diane Ross-Leech – Director, Environmental Policy, PG&E
Mariano Mandler – Sr. Director, Environmental Management, PG&E

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY EDMUND G. BROWN JR., GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Ste. 170
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682

October 18, 2017

Ms. Kaleigh Maze
Biologist
United States Army Corps of Engineers
Sacramento District
1325 J Street, Room 1460
Sacramento, California 95814

Subject: Public Notice of Categorical Permission for Section 408 Requests from U.S. Army Corps of Engineers, Sacramento District

Dear Ms. Maze:

The Central Valley Flood Protection Board (Board) staff has reviewed the Public Notice of Categorical Permission for Section 408 Requests proposed by the U.S. Army Corps of Engineers (USACE), Sacramento District and have the following comments:

The Board supports the development of categorical permissions as outlined in the Engineering Circular (EC) 1165-2-216, *Policy and Procedure Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408*, as any increase in the ability to promptly review the incoming Section 408 requests greatly benefits Board processes.

The jurisdiction of the Board encompasses the Central Valley, including all tributaries and distributaries of the Sacramento River, the San Joaquin River, and designated floodways. The Board also has the responsibility and authority necessary to oversee future modifications of the State Plan of Flood Control (SPFC) as approved by the USACE pursuant to assurance agreements with the USACE and the USACE Operation and Maintenance Manuals under Code of Federal Regulations, Title 33, Section 208.10 and United States Code, Title 33, Section 408.

Pursuant to Title 23, California Code of Regulations (Title 23), the Board issues encroachment permits for the construction, maintenance, and protection of adopted plans of flood control, including the federal-State facilities of the SPFC, regulated streams, and designated floodways. Prior to issuance of an encroachment permit by the Board, permissions pursuant to Section 408 are obtained from the USACE. Issuance of an encroachment permit by the Board is tied to concurrence with the USACE's Flood Protection and Navigation Section's review process, and any efficiency gained in this process is advantageous to the Board and its stakeholders.

Support for the Proposed Categorical Permission for Section 408 Requests

The proposed categorical permissions for Section 408 requests, simplifies the review process for minor alterations. Construction projects categorized as minor alterations that are similar in nature and having similar impacts are appropriate for streamlining within the Section 408 permission process.

The efficiencies created based on the proposed USACE 408 categorical permission process for minor alterations would be a benefit to the Board's current permit process. Obtaining USACE permissions sooner will reduce the time necessary for the Board to issue subsequent encroachment permits that are

minor alterations. The Board looks forward to working with the USACE and the implementation of the proposed Section 408 categorical permissions.

If you have any questions regarding this letter, please contact Andrea Buckley, Environmental Branch Chief at (916) 574-0332 or Andrea.Buckley@CVFlood.ca.gov.

Sincerely,

Leslie Gallagher, Executive Officer
Central Valley Flood Protection Board

CALIFORNIA CENTRAL VALLEY
FLOOD CONTROL
ASSOCIATION

October 17, 2017

Ms. Kaleigh Maze
U.S. Army Corps of Engineers, Sacramento District
1325 J Street, Room 1460
Sacramento, California 95814-2922
VIA ELECTRONIC TRANSMITTAL: *Kaleigh.Maze@usace.army.mil*

SUBJECT: Comments on Section 408 Categorical Permission Proposal, Sacramento District

Dear Ms. Maze:

The California Central Valley Flood Control Association, (CCVFCA) has reviewed the Public Notice regarding intent to implement a Categorical Permission for certain minor alterations under Section 408 in the Sacramento District. Established in 1926 to serve as a common voice for local public agencies with flood control responsibilities, CCVFCA is comprised of 75 members including reclamation districts, levee districts, cities, counties, joint powers agencies, and other special districts that serve as non-federal partners with the State of California on projects proposing alteration of federal flood protection facilities in the Central Valley.

CCVFCA has previously advocated for improvements to the Section 408 process and is therefore pleased to express its support of the proposed Categorical Permission process that can be implemented in the Sacramento District under the Secretary of the Army's existing authority without further legislation. Following are CCVFCA's general and specific comments on the Categorical Permission described in the notice:

a. ***General – Scope.*** We suggest the addition of a new alteration type that would include public safety, recreational, and aesthetic features, such as signs and lighting.

b. ***General - Jurisdiction.*** It should be clarified that the Categorical Permission would only apply to alterations occurring within the lands and real property interests identified and acquired for USACE projects.

c. ***General – Types of Alterations.*** The Categorical Permission includes twenty alteration types with varying technical constraints. It is unclear if the technical constraints are intended to limit the type of alteration that is covered by the Categorical Permission, or if

the intent is to change the level of technical review required as long as the alteration meets the stated constraints, or neither. Assuming that the engineering criteria is unchanged, and must be met for all alterations, we suggest removing any specific technical constraints from the alteration types. For example, under section *9.Fences and Gates*, it states that, "*Fences must be constructed of see-through materials such as chain link or barbed wire...must not penetrate more than 12 inches into the levee prism*". It is not apparent that these constraints affect the magnitude of environmental effects; therefore, the reason for their inclusion is unclear.

If the intention is indeed to apply an engineering constraint to limit the type of alteration covered, we suggest adding other limitations. For example, under section *5. Bridges*, in order for replacement of bridges to be covered by the categorical permission, we suggest requiring that the lowest chord be at, or above, the DWSE or be located at least a foot above the existing.

It should be clarified that the Categorical Permission would not apply to alterations that do not meet engineering criteria, the Categorical Permission does not change engineering criteria, nor does it change the need for technical review, if that is correct.

d. ***General – Project Location.*** For clarity, we suggest that if the alteration type is limited to a certain location within the project right-of-way that it be written as such. For example, "The Categorical Permission for swimming pools is limited to those located in the floodway and more than 15 feet from the waterside toe". In some cases, a location is specifically identified and in others, no location is identified. Additionally, there seems to be inconsistency or nuances in the terms used that are not clear (e.g., levee prism, levee slopes, levee). Also, it is unclear when the actions are allowed to occur within the O&M corridor (i.e., between the levee toe and floodway, and landside levee toe and ROW limit). For example, fences and gates are allowed on the levee and in the floodway. Is the intent to exclude fences and gates off the levee, but not in the floodway?

e. ***General – Levee Improvement Standard.*** The proposed Categorical Permission would benefit from a category of standard levee improvements, although some examples of these actions were already included separately. For example, the Department of Water Resources' Rural Levee Repair Guidelines provide standard repair templates for rural levees that could be covered by the Categorical Permission. Other examples would be relief wells and levee performance monitoring activities (e.g. piezometers, settlement monuments).

f. ***General – Ground Disturbance.*** Most of the twenty alteration types include a threshold for ground disturbance. It is unclear how this threshold was determined and why it varies among the alteration types. From an environmental effects perspective, why is the limit 2 acres for a building or structure, 5 acres for borrow sites, 2.5 acres for an access ramp, 2000 square feet for a swimming pool, and 350 acres for agriculture and landscaping? Similar programmatic/categorical permissions developed by other USACE Districts do not provide ground disturbance thresholds.

g. ***Section 3 - Borings and Other Levee Explorations.*** We suggest that inspection of trenches and test pits be included. Also, the following text, "*A variety of drilling methods*

may be used... " should be revised to "Exploration types include…", as CPTs and borings are not drilling types.

h. ***Section 4 - Borrow Sites.*** The text states that borrow sites are allowed in the floodway, but later states that the borrow sites must be 100 feet from the waterside and landside toes. This distance seems arbitrary and it is unclear why that distance affects environmental effects (see comment a.). It is also unclear if borrow sites located at least 100 feet from the *landside* levee toe are allowed, and even if this is the case, these would likely be outside the project right-of-way and not subject to Section 408.

i. ***Section 9 - Fences and Gates.*** We suggest also including bollards. Additionally, we suggest revising the text from, "*must not limit access or visibility...* " to "must allow for access and visibility…" or alternatively, clarifying "limit access or visibility".

j. ***Section 11 – Pipes.*** We suggest allowing removal of existing penetrations in addition to abandonment and modification.

k. ***Section 18 - Utility Poles.*** We suggest allowing underground utility lines, such as fiber optic, electric, etc.

CCVFCA appreciates the opportunity to review and comment on the Sacramento District's public notice and looks forward to the opportunity to work together on implementing this Categorical Permission.

Sincerely,

Melinda Terry,
Executive Director

CARSON-TRUCKEE
WATER CONSERVANCY DISTRICT
295 Holcomb Ave. Suite A
Reno, NV 89502
PHONE 322-8041
FAX 322-7266

November 3, 2017

Ryan T. Larson, P.E., Chief
USACE Flood Protection & Navigation Section
1325 J Street (CESPK-CO-OR)
Sacramento CA 95814-2922

Subject: **Categorical Permission for Section 408 Permit Reviews**

Dear Mr. Larson:

The Carson-Truckee Water Conservancy District, as the local sponsor on the Upper Truckee River under the Martis Creek Lake Agreement, supports the work you and your team are doing to put in place a process whereby more routine projects, those with minor impacts and not requiring Environmental Assessments or Environmental Impact Statements under NEPA, could qualify for a Section 408 Permit under the Categorical Permission process. We appreciate these efforts to reduce the backlog in reviews and simplify the review process for these minor impact and similar types of projects.

While the District understands that you are in the process of putting this opportunity for the use of Categorical Permissions in place, and establishing a process for projects to qualify for this review pathway, the District asks you to consider using the local sponsor to play a role in the determination review process. The District believes that having the local sponsor take an active role in this Categorical Permission process can help lessen some of the burden of reviewing these projects at the USACE while providing the local sponsor more responsibility for projects to be included in this approach.

Please consider how the District as the local sponsor can participate in the review process so that the 408 Permits can be issued more expeditiously and possibly with more input from the local sponsor who is most familiar with the river and project. The District is open to discussing this opportunity with your office at your earliest convenience.

Thank you again for your efforts to put this Categorical Permission option in place to reduce the lengthy review process for 408 Permits.

Ron Penrose, M.S., P.E.
Superintendent
Carson-Truckee Water Conservancy District

CC: Carson-Truckee Water Conservancy District Directors
Kenneth Brooke, Legislative Assistant, U.S. Congressman Mark Amodei

United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Region
Bay-Delta Office
801 I Street, Suite 140
Sacramento, CA 95814-2536

IN REPLY REFER TO:
BDO-150
ENV-7.00

NOV 16 2017

Ms. Kaleigh Maze
Biologist
U.S. Army Corps of Engineers
Sacramento District
1325 J Street, Room 1460
Sacramento, California 95814-2922

Subject: Comments on Proposed Section 408 Categorical Permission

Dear Ms. Maze:

Thank you for the opportunity to comment on the U.S. Army Corps of Engineers (USACE) Sacramento District's Section 408 Categorical Permission. The Bureau of Reclamation and the U.S. Fish and Wildlife Service, in cooperation with other agencies, implement annual anadromous fish habitat improvement projects in many Central Valley rivers to meet the requirements of the Central Valley Project Improvement Act (CVPIA), Title XXXIV of Public Law 102-575. We support the categorical permission proposed by the USACE to the extent that it will further the purposes of the CVPIA and recommend additional measures to simplify processing applications for projects related to the "12. Restoration" category.

We were made aware of the new Section 408 implementing regulations (Engineering Circular 1165-2-216 POLICY AND PROCEDURAL GUIDANCE FOR PROCESSING REQUESTS TO ALTER USARMY CORPS OF ENGINEERS CIVIL WORKS PROJECTS PURSANT TO 33 USC 408) in May 2017 near the completion of the permitting process for a restoration project in the American River. The determination by the USACE that a Section 408 permit was needed for the American River project came on June 30, 2017, following a pre-application meeting at the Sacramento USACE office on October 6, 2016, and a 404 permit application submitted shortly thereafter. The project had been scheduled to begin in early August 2017, leaving inadequate time to go through the route directed by the USACE to address Section 408. As we understand it, the entire Lower American River became subject to Section 408 with the construction of the new Folsom Dam Auxiliary Spillway. A similar permitting situation subsequently occurred on a project to replenish spawning gravel on the Stanislaus River in Goodwin Canyon. There, three different USACE permits would be needed, along with a State flood board permit.

The September 18, 2017, public notice implies that restoration projects up to the designated size would be exempted from Section 408. However, the USACE would send Federal agencies to apply to a non-Federal sponsor. In our case, the Central Valley Flood Protection Board (whose regulations do not apply to Federal agencies) has been designated as the non-Federal sponsor for

projects in the Central Valley of California. It appears the proposed permission covers an exemption of internal USACE processes but not other Federal applicants.

We support the categorical permission proposed by the USACE and propose incorporating other Federal agencies into Section 408 procedural guidance by exempting Federal project applicants from requiring a non-Federal sponsor. The new review requirements already reduce the ability to incorporate adaptive management into project designs by imposing a 2-year permitting delay period. The intervening time between projects would be needed to conform to the review process while incorporating learning into new project designs. Up until now, there has been time for a feedback loop to incorporate monitoring results from a restoration project completed in September and monitored over the winter for effectiveness, then to incorporate monitoring results into a design completed the following summer for implementation in August-September. If this new process is ultimately used, restoration projects would not move forward with the timeliness needed to maintain and improve the status of species in the rivers affected by Section 408 and costs of implementing the CVPIA and Endangered Species Act (ESA) requirements would increase while the effectiveness would decrease.

A layer of State-level review does not appear warranted. Federal agencies, especially those charged with maintaining and operating dams, should be able to coordinate directly with the USACE. We coordinate the technical implementation of projects extensively with our State partners. However, an additional process of State review procedures adds little value and creates a burden for all parties.

Thus, though we support the Categorical Permission for Restoration, we recommend that coordination occur directly between the USACE and other Federal agencies. This approach may better support our ongoing partnership. Recognizing that restoration projects are a part of Federal project operations and mitigation they would need not, therefore, undergo a separate 408 review by the State. All projects are designed to be flood-neutral and we propose to work directly with the USACE to certify the safety of projects with regards to flooding.

This approach is consistent with the USACE obligations to administer Section 408 in the public interest, to account for ESA obligations, and to "avoid unnecessary regulatory controls," especially when other Federal agencies are involved (33 C.F.R. § 320.1(a)(3).

Thank you for the opportunity to comment and we look forward to working together on future projects. If you would like to discuss these recommendations further, please contact me at dmmooney@usbr.gov or 916-414-2400.

Sincerely,

David M. Mooney
Area Manager

From: Maze, Kaleigh CIV USARMY CESPK (US)
To: Maze, Kaleigh CIV USARMY CESPK (US)
Bcc:
Subject: Public Notice: Draft Documents for Categorical Permission for Section 408 Requests
Date: Tuesday, October 9, 2018 8:15:00 AM

Section 408 Public Notice

The U.S. Army Corps of Engineers Sacramento District has posted draft documents for the Categorical Permission for Section 408 Requests to http://www.spk.usace.army.mil/Media/USACE-Project-Public-Notices/

There are numerous U.S. Army Corps of Engineers (USACE) civil works projects within the boundaries of the South Pacific Division, Sacramento District. These projects have been federally authorized by the U.S. Congress and then turned over to a non-federal sponsor to operate and maintain. Projects may include flood risk management projects such as levees and channels located in both rural and urban areas. USACE, pursuant to 33 U.S.C. 408 (Section 408), reviews requests to alter USACE federally authorized civil works projects. The Section 408 permission process is separate and independent of any Department of the Army Section 404 and Section 10 permitting actions.

In accordance with Engineering Circular (EC) 1165-2-220, the Sacramento District proposes to implement a categorical permission in order to create efficiencies in the review process for Section 408 requests for minor alterations to USACE projects within the civil works boundaries of the district. The proposed categorical permission would encompass a list of potential alterations that are similar in nature and have similar impacts. EC 1165-2-220 guidance requires USACE to make the draft categorical permission available for public comment.

Draft documents for the Categorical Permission for Section 408 Requests can be found at:
http://www.spk.usace.army.mil/Portals/12/documents/usace_project_public_notices/408_Documents/CategoricalPermission_PublicDraft_04October2018.pdf?ver=2018-10-05-105640-107

Comments on the draft documents must be received by November 8, 2018.

Written comments and/or a request for a paper copy of the draft documents may be submitted to Ms. Kaleigh Maze at U.S. Army Corps of Engineers, Levees and Channels Branch, 1325 J Street, Sacramento, California, 95814-2922, or by email: Kaleigh.Maze@usace.army.mil.

OFFICE *of* ARCHAEOLOGY *and* HISTORIC PRESERVATION

OCT 15 2018

Kaleigh Maze
U.S. Army Corps of Engineers
Levees and Channel Branch
1325 J Street
Sacramento, California 95814-2922

Re: Categorical Permission for Section 408 Requests, U.S. Army Corps of Engineers Sacramento District (HC #75062)

Dear Ms. Maze:

This letter is provided in response to a U.S. Army Corps of Engineers (USACE) Public Notice for the referenced activities that we received via email on October 9, 2018.

As we understand, categorical permission is intended to introduce review process efficiencies for Section 408 permit requests characterized as minor alterations to USACE projects within the Sacramento civil work boundary. As stated in your email, categorical permissions would "encompass a list of potential activities that are similar in nature and have similar impacts." Our comments are provided pursuant to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations 36 CFR Part 800.

Following our review of the draft documentation, it appears that many if not all of the proposed activities would be considered undertakings with the potential to affect historic properties. In order for the USACE to meets is responsibilities under Section 106 of the NHPA, we recommend that it develop a program alternative pursuant to 36 CFR 800.14 that would best meet its goals. There are a number of alternatives available to you and we recommend that you begin to discuss these with the Advisory Council of Historic Preservation and with the individual State Historic Preservation Officers within your district boundary.

We request being involved in the consultation process. If we may be of further assistance, please contact Mark Tobias, Intergovernmental Services Manager, at (303) 866-4674 or mark.tobias@state.co.us.

Sincerely,

Holly K. Norton

for Steve Turner, AIA
State Historic Preservation Officer
ST/mt

From: Wikert, John
To: Maze, Kaleigh CIV USARMY CESPK (US)
Subject: [Non-DoD Source] Re: [EXTERNAL] Public Notice: Draft Documents for Categorical Permission for Section 408 Requests
Date: Thursday, October 18, 2018 3:42:16 PM

Kaleigh,

I'm glad to see that the 408 streamlining is moving forward. I did want to share one concern that might disqualify many of our restoration projects: "8. The alteration would require an Environmental Assessment or Environmental Impact Statement." We nearly always prepare these for projects as part of our Section 7 consultations internally within FWS and externally with NMFS. If the need for this document will disqualify the project, then the streamlined approach does not help us with restoration. I expect that your concern is that the Corps needs to prepare an EA or EIS, requiring additional time/effort by the Corps. Perhaps you could modify the language to indicate that if another Federal agency has taken the responsibility for the EA/EIS then the project is not disqualified from the streamlined process.

I'm happy to chat with you about the issue if you would like. I'll be in my office most of the morning tomorrow.

Thanks for the opportunity to comment.

On Tue, Oct 9, 2018 at 8:17 AM Maze, Kaleigh CIV USARMY CESPK (US) <Kaleigh.Maze@usace.army.mil <mailto:Kaleigh.Maze@usace.army.mil> > wrote:

Section 408 Public Notice

The U.S. Army Corps of Engineers Sacramento District has posted draft documents for the Categorical Permission for Section 408 Requests to Blockedhttp://www.spk.usace.army.mil/Media/USACE-Project-Public-Notices/

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In accordance with Engineering Circular (EC) 1165-2-220, the Sacramento District proposes to implement a categorical permission in order to create efficiencies in the review process for Section 408 requests for minor alterations to USACE projects within the civil works boundaries of the district. The proposed categorical permission would encompass a list of potential alterations that are similar in nature and have similar impacts. EC 1165-2-220 guidance requires USACE to make the draft categorical permission available for public comment.

Draft documents for the Categorical Permission for Section 408 Requests can be found at: Blockedhttp://www.spk.usace.army.mil/Portals/12/documents/usace_project_public_notices/408_Documents/CategoricalPermission_PublicDraft_04October2018.pdf?ver=2018-10-05-105640-107

Comments on the draft documents must be received by November 8, 2018.

Written comments and/or a request for a paper copy of the draft documents may be submitted to Ms. Kaleigh Maze at U.S. Army Corps of Engineers, Levees and Channels Branch, 1325 J Street, Sacramento, California, 95814-2922, or by email: Kaleigh.Maze@usace.army.mil <mailto:Kaleigh.Maze@usace.army.mil> .

--

J.D. Wikert
U.S. Fish & Wildlife Service
Anadromous Fish Restoration Program
850 S. Guild Avenue, Suite 105,
Lodi , CA 95240
(209) 334-2968 ext. 403
(209) 403-1046 - Cellular
Email: john_wikert@fws.gov <mailto:john_wikert@fws.gov>
Stanislaus River Salmon Festival: Blockedhttps://www.facebook.com/SRSFest

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

October 22, 2018

SENT VIA EMAIL

Ms. Kaleigh Maze
US Army Corps of Engineers, Sacramento District
1325 J Street, Room 1460
Sacramento, CA 95814-2922

Categorical Permissions for Section 408 Requests

Dear Ms. Maze:

Thank you for providing the Categorical Permissions for Section 408 Requests document to the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District) for review. The Army Corps of Engineers (Army Corps) is proposing to adopt a Categorical Permission for minor alteration requests to Army Corps projects for Section 408, where the projects are similar in type and the effects appear to be minor or negligible. The Categorical Permission will include a programmatic environmental assessment, require standard mitigation measures and best management practices, and provide for streamlining of the approval process for these requests. Sac Metro Air District staff comments on the proposal follow.

It appears the Army Corps proposes to use the de minimis air quality standards as the criteria to determine if a project poses an air quality impact. Sac Metro Air District requests the Army Corps analyze emissions from each of the typical project types included in the Categorical Permission and compare the results to local air district thresholds of significance, which are much lower and more health protective than the de minimis air quality standards.

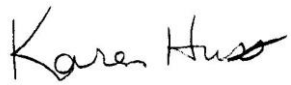
Sac Metro Air District requests the Army Corps include the attached Basic Construction Emission Control Practices as a minimum standard mitigation measure for all projects covered by the Categorical Permission.

If the air emissions analysis for the Categorical Permission programmatic environmental assessment indicates emissions may exceed Sac Metro Air District thresholds of significance for the typical project types, the Sac Metro Air District recommends adding the Enhanced Exhaust Control Practices and Enhanced Particulate Fugitive Dust Control Practices as standard mitigation or best management practices to the project types identified/expected to need the additional mitigation. Both enhanced practices are also attached.

All projects are subject to Sac Metro Air District rules in effect at the time of construction. The Sac Metro Air District's Rules Statement is attached and should be included as a reminder to all Section 408 requests covered under the Categorical Permission.

Please contact me at 916-874-4881 or khuss@airquality.org if you have any questions regarding these comments.

Sincerely,



Karen Huss
Associate Air Quality Planner/Analyst

Attachments:

Basic Construction Emissions Control Practices
Enhanced Exhaust Control Practices
Enhanced Particulate Fugitive Dust Control Practices
Rules Statement

Cc: Paul Philley, Sac Metro Air District

BASIC CONSTRUCTION EMISSION CONTROL PRACTICES (BEST MANAGEMENT PRACTICES)

The following Basic Construction Emissions Control Practices are considered feasible for controlling fugitive dust from a construction site. The practices also serve as best management practices (BMPs), allowing the use of the non-zero particulate matter significance thresholds.

Control of fugitive dust is required by District Rule 403 and enforced by District staff.

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel powered equipment. The California Air Resources Board enforces the idling limitations.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.

Although not required by local or state regulation, many construction companies have equipment inspection and maintenance programs to ensure work and fuel efficiencies.

- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Lead agencies may add these emission control practices as Conditions of Approval (COA) or include in a Mitigation Monitoring and Reporting Program (MMRP).

ENHANCED EXHAUST CONTROL PRACTICES

1. The project representative shall submit to the lead agency and District a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.

    - The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment.
    - The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.
    - This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment.
    - The District's Equipment List Form can be used to submit this information.
    - The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.

2. The project representative shall provide a plan for approval by the lead agency and District demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NO_X reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average.

    - This plan shall be submitted in conjunction with the equipment inventory.
    - Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
    - The District's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.

3. The project representative shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour.

    - Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately.

- Non-compliant equipment will be documented and a summary provided to the lead agency and District monthly.
- A visual survey of all in-operation equipment shall be made at least weekly.
- A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.

4. The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supercede other District, state or federal rules or regulations.

ENHANCED FUGITIVE PM DUST CONTROL PRACTICES

SOIL DISTURBANCE AREAS

- Water exposed soil with adequate frequency for continued moist soil. However, do not overwater to the extent that sediment flows off the site.
- Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 mph.
- Install wind breaks (e.g., plant trees, solid fencing) on windward side(s) of construction areas.
- Plant vegetative ground cover (fast-germinating native grass seed) in disturbed areas as soon as possible. Water appropriately until vegetation is established.

UNPAVED ROADS (ENTRAINED ROAD DUST)

- Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.
- Treat site accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips, mulch, or gravel to reduce generation of road dust and road dust carryout onto public roads.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the District shall also be visible to ensure compliance.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Sac Metro Air District Rules & Regulations Statement (revised 6/2018)

*The following statement is recommended as standard condition of approval or construction document language for **all** development projects within the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District):*

All projects are subject to Sac Metro Air District rules in effect at the time of construction. A complete listing of current rules is available at www.airquality.org or by calling 916-874-4800. Specific rules that may relate to construction activities or building design may include, but are not limited to:

Rule 201: General Permit Requirements. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from Sac Metro Air District prior to equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the Sac Metro Air District early to determine if a permit is required, and to begin the permit application process. Other general types of uses that require a permit include, but are not limited to, dry cleaners, gasoline stations, spray booths, and operations that generate airborne particulate emissions. Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc.) with an internal combustion engine over 50 horsepower is required to have a Sac Metro Air District permit or a California Air Resources Board portable equipment registration (PERP) (see Other Regulations below).

Rule 402: Nuisance. The developer or contractor is required to prevent dust or any emissions from onsite activities from causing injury, nuisance, or annoyance to the public.

Rule 403: Fugitive Dust. The developer or contractor is required to control dust emissions from earth moving activities, storage or any other construction activity to prevent airborne dust from leaving the project site.

Rule 414: Water Heaters, Boilers and Process Heaters Rated Less Than 1,000,000 BTU PER Hour. The developer or contractor is required to install water heaters (including residence water heaters), boilers or process heaters that comply with the emission limits specified in the rule.

Rule 417: Wood Burning Appliances. This rule prohibits the installation of any new, permanently installed, indoor or outdoor, uncontrolled fireplaces in new or existing developments.

Rule 442: Architectural Coatings. The developer or contractor is required to use coatings that comply with the volatile organic compound content limits specified in the rule.

Rule 453: Cutback and Emulsified Asphalt Paving Materials. This rule prohibits the use of certain types of cut back or emulsified asphalt for paving, road construction or road maintenance activities.

Rule 460: Adhesives and Sealants. The developer or contractor is required to use adhesives and sealants that comply with the volatile organic compound content limits specified in the rule.

Rule 902: Asbestos. The developer or contractor is required to notify the Sac Metro Air District of any regulated renovation or demolition activity. Rule 902 contains specific requirements for surveying, notification, removal, and disposal of asbestos containing material.

Other Regulations (California Code of Regulations (CCR))

17 CCR, Division 3, Chapter 1, Subchapter 7.5, §93105 Naturally Occurring Asbestos: The developer or contractor is required to notify the Sac Metro Air District of earth moving projects, greater than 1 acre in size in areas "Moderately Likely to Contain Asbestos" within eastern Sacramento County. The developer or contractor is required to comply with specific requirements for surveying, notification, and handling soil that contains naturally occurring asbestos.

13 CCR, Division 3, Chapter 9, Article 5, Portable Equipment Registration Program: The developer or contractor is required to comply with all registration and operational requirements of the portable equipment registration program such as recordkeeping and notification.

13 CCR, Division 3, Chapter 9, Article 4.8, §2449(d)(2) and 13 CCR, Division 3, Chapter 10, Article 1, §2485 regarding Anti-Idling: Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes. These apply to diesel powered off-road equipment and on-road vehicles, respectively.

October 31, 2018

Ms. Kaleigh Maze
U.S. Army Corps of Engineers
Levees and Channels Branch
1325 J Street, Sacramento, California, 95814-2922
Kaleigh.Maze@usace.army.mil.

Re: Comments on Draft SPK Categorical Permission for Section 408 Requests

Dear Ms. Maze:

The California Central Valley Flood Control Association (CCVFCA) counts over 75 public agencies as members, representing reclamation districts, levee districts, cities, counties, joint powers agencies, and other special districts. The CCVFCA is the only common voice for flood control agencies in Northern Central Valley, including the Delta, and our members have been long-time and reliable partners of the State of California in reducing flood risk.

The CCVFCA is pleased that the U.S. Army Corps of Engineers (USACE) Sacramento District has developed categorical permissions for Section 408 requests. We are strongly in favor of the Sacramento District adopting categorical permissions as a way to efficiently streamline the permitting for necessary flood risk reduction. The purpose of this letter is to express our strong support for this action and to propose modifications to the draft document that we think will further strengthen the streamlined process.

1. The draft document provides that a categorical permission would not be available if "[t]he alteration would require an Environmental Assessment or Environmental Impact Statement." However, an Environmental Assessment (EA) is very different than an Environmental Impact Statement (EIS). While an EIS is designed to identify very specific impacts associated with a project, an EA is a concise public document that provides sufficient evidence and analysis for determining whether a Federal agency should issue a Finding of No Significant Environmental Impact (FONSI) or should prepare an EIS. In other words, the preparation of an EA alone is not an indication that there are significant impacts, because that process can end with a finding that there are NO significant impacts. For this reason, the draft document should be changed to remove the reference to preparation of an EA.

2. The draft document provides for fence permission but notes that "[g]ates must be wide enough to allow personnel, equipment, and vehicle access. In general, swing gates are preferred to rolling gates." While this restriction makes sense for a perpendicular fence that crosses a

levee, at times fences are parallel fences along residential back yards or along public parks and may be sitting right on the Federal easement. In this case gates will not be large enough to allow vehicle access. This would especially be a concern in the process of permitting an existing fence that did not obtain a permit when originally constructed. As a result the document should be changed.

3. The categorical permissions should also include the installation of slurry walls. We recognize that long lengths of slurry wall have the potential for more impacts, but there are times when a slurry wall may only be needed for a short reach and may be less impacting than a seepage berm. We suggest that slurry walls, that otherwise meet all of the other provisions of the categorical permission, be permitted if they are no longer than 2,000 feet in length.

4. We believe that a 5 acre limitation on seepage and stability berms is too limiting. By way of example, two recent seepage berms constructed in rural areas (Grand Island and Sacramento River West Side Levee District) were 7 acres and more than 5 acres, respectively. And in urban areas, a number of seepage berms that exceeded those limitations have recently been constructed. See for example, recently constructed berms in RD 17:

PHASE 1	
Site	Acreage
3a	8.1
6b	4.4
TOTAL	**12.5**

PHASE 2	
Site	Acreage
1c	1.4
1d	0.7
4b	2.8
6a2	6.3
6a3	3.8
7b	5.1
7g	5.8
TOTAL	**25.9**

For that reason we believe that the 5 acre limitation should be modified to 10 acres.

5. Finally, in regard to irrigation wells, we believe they should have to be a minimum of 50 feet from the levee toe to be considered as a categorical permission. Wells any closer to the flood control project have the potential for seepage impacts to the levee.

6. The draft document provides that a categorical permission would not be available if "[t]he alteration would remove riparian or sensitive habitat." However it's not unusual for even a minor flood repair project to require, for example, the relocation of a valley elderberry bush, or the removal of a waterside tree. Therefore we would recommend that the disqualification

language regarding impacts to riparian and sensitive habitat be revised as follows: "[t]he alteration is likely to adversely affect listed species, proposed species, or designated critical habitat, and no conservation measures are available and/or feasible to avoid or minimize the adverse effects."

The CCVFCA is appreciative of the USACE's consideration of this matter.

Sincerely,

Melinda Terry

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Office of the Governor
PUBLIC LANDS POLICY COORDINATING OFFICE

KATHLEEN CLARKE
Director

November 6, 2018

Sent via electronic mail: Kaleigh.Maze@usace.army.mil

Kaleigh Maze
U.S. Army Corps of Engineers
Levees and Channels Branch
1325 J Street
Sacramento, California 95814-2922

Subject: **Draft Categorical Permission for Section 408 Requests**
RDCC Project No. 65923

Dear Ms. Maze:

The State of Utah appreciates the opportunity to review the Draft Categorical Permission for Section 408 Requests. The State supports USACE efforts to expedite and streamline the review and decisions for Section 408 requests that are similar in nature and have similar impacts to the USACE project and environment.

As indicated in the draft document, the majority of Section 408 Requests entail minor alterations of a levee or channel, such as installation of irrigation pipes, horizontal directional drilling for placement of utility lines, and private recreational boat docks. The descriptions and criteria to be used to determine validation under the categorical permissions (CP) have been coordinated with Regulatory Division to ensure consistency between similar permitting actions. Moreover, the comprehensive review of the CP at five years and revaluation after a shorter time period, if conditions warrant, safeguards the public interest as well supplements the usefulness of the project.

Beyond streamlining the review and simplifying the validation and decision making process for Section 408 Requests, CP alterations would also improve productivity in relation to time and cost. Please direct any written questions in regard to this correspondence to the Public Lands Policy Coordinating Office at the address below, or call to discuss any questions or concerns.

Sincerely,

Kathleen Clarke
Director

From:	Wright, Michael@CVFPB
To:	Maze, Kaleigh CIV USARMY CESPK (US)
Cc:	Larson, Ryan T CIV USARMY CESPK (US); Soule, Kelly@CVFPB; Lemon, Gary@CVFPB
Subject:	[Non-DoD Source] Draft Docs for Categorical Permission for Section 408 Request
Date:	Wednesday, November 7, 2018 4:06:17 PM

Kaleigh,

Thank you for the opportunity to review and comment on the USACE's Categorical Permission for Section 408 Requests. Board staff has the following comments for consideration:

* Section: Introduction, last sentence (page 1).

    * Comment/observation: Suggest adding "or for removal of similar alterations." At the end of the last sentence to be consistent with proposed Engineering Condition #18.

* Section: Categorical Permission Alteration Descriptions, Agriculture and Landscaping, third paragraph (page 1)

    * Comment/observation: Per Categorical Permission(CP) requirement, orchards, flower gardens, vegetable gardens would not be permitted within 15 feet of the levee toes; this could imply that orchards would be allowed within bypasses (e.g. Yolo Bypass). California Code of Regulations Title 23, Division 1, Article 8, Section 131 (h) does not permit orchards within bypasses. Suggest clarifying that orchards would not be permitted within bypasses.

Thank you,

Mike

Michael C. Wright, PE

Acting Chief Engineer

Central Valley Flood Protection Board

State of California

3310 El Camino Ave., Ste. 170

Sacramento, CA 95821

Desk: (916) 574-0698

Cell: (916) 952-8453

Michael.Wright@CVFlood.ca.gov <mailto:Michael.Wright@CVFlood.ca.gov>

November 8, 2018

WATER FORUM

Sacramento City-County Office of Metropolitan Water Planning

SENT VIA E-MAIL (Kaleigh.Maze@usace.army.mil)

Headquarters, U.S. Army Corps of Engineers
ATTN: CECW-CE/3E62
Division of Policy, Performance and Management Programs
441 G Street NW
Washington, DC 20314-1000

RE: Comments on USACE's Section 408 Draft Guidelines

Dear Ms. Maze:

This letter is submitted on behalf of the Sacramento Water Forum (Water Forum) regarding the draft guidelines for the USACE's Engineer Circular 1165-2-220 (Draft Guidelines).

By way of brief background, the Water Forum is a diverse consortium of water agencies, agricultural leaders and environmental groups working together toward restoration and preservation of the lower American River in the Sacramento region of California to benefit fishery, wildlife, recreational and aesthetic values of the lower American River while also better ensuring reliable and safe water supplies exist for the Sacramento region. Geographically, the lower American River is approximately 23-miles of river located between Folsom Reservoir and the confluence with the Sacramento River in the City of Sacramento. Since 2000, the Water Forum has been partnering with State and Federal agencies – including USACE – to implement the Central Valley Project Improvement Act (CVPIA), which is designed to "protect, restore, and enhance fish, wildlife, and associated habitats in the Central Valley and Trinity River basins of California." (Title 34 of Public Law 102-575). This act, signed in 1992, enables the U.S. Bureau of Reclamation to partner with U.S. Fish and Wildlife Service to operate the Folsom Reservoir and Nimbus Dam projects without jeopardizing salmonid species. As part of these projects, the Water Forum has been partnering with these agencies to conduct salmonid restoration work in the lower American River on their behalf.

To that end, the Water Forum's review of the Draft Guidelines reveals two areas worthy of our comments. The first area relates to our support for Categorical Permissions, namely Categorical Permission 8: Environmental Restoration (CP 8), as we understand CP 8 to not require a non-federal sponsor. The second area of our comments is to request a timeline, or such other clarification, as to how quickly USACE decisions will be for projects qualifying for Categorical Permissions, including those set forth in CP 8.

As to CP 8, our reading of the plain language of CP 8 establishes that a non-federal sponsor is not required for projects qualifying under CP 8 because CP does not say so, while other Categorical Permission explicitly do require a non-federal sponsor, such as those involving retaining walls (Categorical Permission 18) and buildings and structures (Categorical Permission

5). If USACE's intention is different than the Water Forum's understanding as stated above, then please clarify this point in writing and the rationale for having included a non-federal sponsor for projects qualifying under CP 8. Otherwise, the Water Forum intends to operate under CP 8 without a non-federal sponsor. After all, with the Categorical Permissions designed to streamline certain projects, such as those contemplated by CP 8, the lack of a non-federal sponsor makes for good policy, particularly when the projects and its participants are well-established as experienced and competent.

Our second topic is one of good policy to promote efficiency, predictability and success for projects by providing the applicant and stakeholders with a timeline by which USACE would normally anticipate making decisions for Categorical Permissions, particularly for projects subject to CP 8 in which non-federal sponsor(s) are not required. Qualitatively it helps to know the process is streamlined, but practically given project specifications and dynamics, better success can be achieved by USACE establishing a timeline or such other metric for processing and completing its role with Categorical Permissions.

In conclusion, the Water Forum supports much of the foundation of the Draft Guidelines. However, incorporating a timeline for USACE decision-making would greatly assist project proponents to advance and complete worthy projects that achieved common goals of regulatory agencies and localized stakeholders. Thank you for the opportunity to provide comments.

Sincerely,

Tom Gohring, P.E.
Executive Director
The Water Forum

cc:

John Hannon

From: Lizel Allen
To: Maze, Kaleigh CIV USARMY CESPK (US)
Subject: [Non-DoD Source] RE: Public Notice: Draft Documents for Categorical Permission for Section 408 Requests
Date: Thursday, November 8, 2018 3:26:10 PM

Kaleigh,

I am excited for this Categorical Permissions Document. It is comprehensive and will help our Surplus Levee project.

I did have one comment on the draft document.

The second paragraph of 11. FIBER OPTIC AND DRY UTLITY PIPES states "All new fiber optic, electrical and other dry utility pipes must go up and over the levee design water surface elevation (DWSE)." This seems to conflict with the 14. HORIZONTAL DIRECIONAL DRILLING (HDD) section. The majority of our HDD permits are for fiber optic lines. Can new fiber optic lines comply with Section 14 instead of going up and over the DWSE as requested in Section 11?

Thanks,

Lizel Allen, PE, CFM
Associate Director
Salt Lake County Flood Control
2001 S. State St. N3-120
Salt Lake City, UT 84190
Ph: (385) 468-6634

-----Original Message-----
From: Maze, Kaleigh CIV USARMY CESPK (US) [mailto:Kaleigh.Maze@usace.army.mil]
Sent: Tuesday, October 9, 2018 9:15 AM
To: Maze, Kaleigh CIV USARMY CESPK (US) <Kaleigh.Maze@usace.army.mil>
Subject: Public Notice: Draft Documents for Categorical Permission for Section 408 Requests

Section 408 Public Notice

The U.S. Army Corps of Engineers Sacramento District has posted draft documents for the Categorical Permission for Section 408 Requests to Blockedhttp://www.spk.usace.army.mil/Media/USACE-Project-Public-Notices/

There are numerous U.S. Army Corps of Engineers (USACE) civil works projects within the boundaries of the South Pacific Division, Sacramento District. These projects have been federally authorized by the U.S. Congress and then turned over to a non-federal sponsor to operate and maintain. Projects may include flood risk management projects such as levees and channels located in both rural and urban areas. USACE, pursuant to 33 U.S.C. 408 (Section 408), reviews requests to alter USACE federally authorized civil works projects. The Section 408 permission process is separate and independent of any Department of the Army Section 404 and Section 10 permitting actions.

In accordance with Engineering Circular (EC) 1165-2-220, the Sacramento District proposes to implement a categorical permission in order to create efficiencies in the review process for Section 408 requests for minor alterations to USACE projects within the civil works boundaries of the district. The proposed categorical permission would encompass a list of potential alterations that are similar in nature and have similar impacts. EC 1165-2-220 guidance requires USACE to make the draft categorical permission available for public comment.

Draft documents for the Categorical Permission for Section 408 Requests can be found at:
Blockedhttp://www.spk.usace.army.mil/Portals/12/documents/usace_project_public_notices/408_Documents/CategoricalPermission_PublicDraft_04October2018.pdf?ver=2018-10-05-105640-107

Comments on the draft documents must be received by November 8, 2018.

Written comments and/or a request for a paper copy of the draft documents may be submitted to Ms. Kaleigh Maze at U.S. Army Corps of Engineers, Levees and Channels Branch, 1325 J Street, Sacramento, California, 95814-2922, or by email: Kaleigh.Maze@usace.army.mil.

8 November 2018

Ms. Kaleigh Maze
U.S. Army Corps of Engineers, Sacramento District
Levees and Channels Branch
1325 J Street
Sacramento, California, 95814-2922

RE: CATEGORICAL PERMISSION FOR SECTION 408 REQUESTS U.S. ARMY CORPS OF ENGINEERS SACRAMENTO DISTRICT

Dear Ms. Maze,

Thank you for the opportunity to provide comments and responses to the draft document "Categorical Permission for Section 408 Requests" for the Sacramento District. The signatories to this letter have been actively engaged in environmental restoration and multi-benefit flood management planning within the Sacramento District, and specifically in the Central Valley of California, for decades. We want to send our sincere appreciation and gratitude for the leadership provided by the Sacramento District staff to address what was a significant obstacle to environmental improvement in this District.

As you know, the habitats and the wildlife that rely on healthy rivers and streams in the Central Valley of California have been dramatically impacted by catastrophic habitat clearing, flow modification, and the disconnection of flood flows from the natural floodplain, leaving many wildlife species on the brink of extinction and exacerbating flood hazard for residents. The intersection of flood management and environmental improvement in the Central Valley has formed the backdrop for a fundamental shift in flood policy in California, specifically the development of the Central Valley Flood Protection Plan and its associated Conservation Strategy. We are hopeful that California will continue to be a world-wide leader in multi-benefit flood management integrating human values and wildlife habitat function in ways that benefit all user groups in our watersheds. With support from local, NGO, state and federal players, we are hopeful that meaningful environmental improvement in the Central Valley will only grow in the coming years.

One of the primary limitations to increasing the pace and scale of habitat restoration in the Central Valley has been the complexity of the regulatory environment here, and the length of time required to take a project idea from conception to implementation as it navigates through federal, state and local approval processes. Your proposed Categorical Permission for Environmental Restoration has the potential to provide significant relief from a portion of this long regulatory process. We are excited to work with you and the dedicated staff in the Sacramento District to use these proposed permissions to deliver environmental improvements within the footprint of our federal flood control projects that will keep pace with the needs and desires of Californians.

Thank you for your leadership in improving the 408 permitting process, and please continue to work with us to deliver smarter and more robust flood management for California.

Sincerely,

Julie Rentner, River Partners

Daniel Nylen, American Rivers

Jacob Katz, CalTrout

Ron Stork, Friends of the River

CC:

Bill Edgars, Central Valley Flood Protection Board

Kris Tjernell, California Department of Water Resources

Eric Koch, California Department of Water Resources

Andrew Fahlund, California Water Foundation

From: Luke, Brian J CIV CESPK CESPD (US)
To: LBill@yochadehe-nsn.gov
Cc: Maze, Kaleigh CIV USARMY CESPK (US)
Subject: RE: Public Notice: Draft Documents for Categorical Permission for Section 408 Requests (UNCLASSIFIED)
Date: Friday, November 9, 2018 9:56:08 AM

Hi Laverne,

We are under a tight timeline to complete the categorical permission documentation. We will consider your comments if received by close of business on Tuesday, November 13, 2018.

Thank you for your interest.

Brian

Brian J. Luke
Natural Resources Specialist
Flood Protection & Navigation Section
U.S. Army Corps of Engineers
1325 J. Street
Sacramento, CA 95814-2922
(916) 557-6629 office
(916) 557-7724 fax
brian.j.luke@usace.army.mil

-----Original Message-----
From: Maze, Kaleigh CIV USARMY CESPK (US)
Sent: Thursday, November 8, 2018 3:56 PM
To: Luke, Brian J CIV CESPK CESPD (US) <Brian.J.Luke@usace.army.mil>; Larson, Ryan T CIV USARMY CESPK (US) <Ryan.T.Larson2@usace.army.mil>; Leonard, Kimberlee K CIV (US) <Kimberlee.K.LEONARD@usace.army.mil>; Murakami, Robert H CIV USARMY CESPK (US) <Robert.Murakami@usace.army.mil>
Subject: FW: Public Notice: Draft Documents for Categorical Permission for Section 408 Requests (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

-----Original Message-----
From: Laverne Bill [mailto:LBill@yochadehe-nsn.gov]
Sent: Thursday, November 8, 2018 6:10 PM
To: Maze, Kaleigh CIV USARMY CESPK (US) <Kaleigh.Maze@usace.army.mil>
Subject: [Non-DoD Source] RE: Public Notice: Draft Documents for Categorical Permission for Section 408 Requests

Kaleigh, we have been working on a response for this document, but have not finished it. We need to get a few week extension to ensure you receive the Tribes comments. Please advise that you have received this. Thanks.

Laverne Bill
Cultural Resources Department Manager &
Cultural Resources Manager

Tewe Kewe Cultural Center
PO Box 18 | Brooks, CA 95606
p 530.796.3400 | c 530.723.3891
f 530.796.2143
lbill@yochadehe-nsn.gov
Blockedwww.yochadehe.org

-----Original Message-----
From: Maze, Kaleigh CIV USARMY CESPK (US) [mailto:Kaleigh.Maze@usace.army.mil]
Sent: Tuesday, October 09, 2018 8:17 AM
To: Maze, Kaleigh CIV USARMY CESPK (US)
Subject: Public Notice: Draft Documents for Categorical Permission for Section 408 Requests

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In accordance with Engineering Circular (EC) 1165-2-220, the Sacramento District proposes to implement a categorical permission in order to create efficiencies in the review process for Section 408 requests for minor alterations to USACE projects within the civil works boundaries of the district. The proposed categorical permission would encompass a list of potential alterations that are similar in nature and have similar impacts. EC 1165-2-220 guidance requires USACE to make the draft categorical permission available for public comment.

Draft documents for the Categorical Permission for Section 408 Requests can be found at:
Blockedhttp://www.spk.usace.army.mil/Portals/12/documents/usace_project_public_notices/408_Documents/CategoricalPermission_PublicDraft_04October2018.pdf?ver=2018-10-05-105640-107

Comments on the draft documents must be received by November 8, 2018.

Written comments and/or a request for a paper copy of the draft documents may be submitted to Ms. Kaleigh Maze at U.S. Army Corps of Engineers, Levees and Channels Branch, 1325 J Street, Sacramento, California, 95814-2922, or by email: Kaleigh.Maze@usace.army.mil.

CLASSIFICATION: UNCLASSIFIED

APPENDIX B: LIST OF THREATENED AND ENDANGERED SPECIES

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Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Amphibians			
Ambystoma californiense; California tiger salamander	Endangered in Sonoma County (March 19, 2003 [68 FR 13498]); Endangered in Santa Barbara County (January 19, 2000 [65 FR 3096] and September 21, 2000 [65 FR 57242]); Threatened in Central California (August 4, 2004 [69 FR 47212])	Sonoma County final designated December 14, 2005 (70 FR 74138); Santa Barbara County final designated November 24, 2004 (69 FR 68568); Central California final designated August 23, 2005 (70 FR 49380)	California tiger salamanders require large tracts of upland habitat, with abundant underground refugia (particularly small mammal burrows), near suitable breeding ponds (generally vernal pools or wetlands). Tiger salamanders are known to migrate up to 1.3 miles to and from breeding ponds and upland habitat.
Rana draytonii; California red-legged frog	Threatened; May 23, 1996 (61 FR 25813)	Final designated April 13, 2006 (71 FR 19244); revised on March 17, 2010 (75 FR 12816)	Adult California red-legged frogs are able to use a variety of aquatic, riparian, and upland habitat types provided a permanent, preferably slow moving, water source is nearby.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Rana sierrae; Sierra Nevada yellow-legged frog	Endangered; April 29, 2014 (79 FR 24256)	Final designated August 26, 2016 (81 FR 59045)	Sierra Nevada yellow-legged frogs currently exist in montane regions of the Sierra Nevada of California. This species is highly aquatic and at lower elevations is associated with rocky streambeds and wet meadows surrounded by coniferous forest in. This species is more abundant at higher elevations where it is associated with lakes, ponds, tarns, and streams.
Birds			
Coccyzus americanus occidentalis; western DPS of yellow-billed cuckoo	Threatened; October 3, 2014 (79 FR 59992)	Proposed August 15, 2014 (79 FR 48548)	The yellow-billed cuckoo, a Neotropical migrant, requires relatively large (> 50 acres) patches of multilayered riparian habitat at low to moderate elevations for nesting. Cottonwood and willow dominated habitat is preferred. Smaller riparian patches can be used as migratory corridors. The western DPS includes California, western Colorado, Nevada, and Utah.
Gymnogyps californianus; California condor	Endangered; March 11, 1967 (32 FR 4001)	Final designated September 24, 1976 (41 FR 41914)	The California condor was absent from the wild from 1987 to 1992, when captive-reared birds were released in California and 1996 when captive-reared birds were released in Arizona. Currently, the California condor forages in foothill grassland and oak savanna habitats and at coastal sites in southern California, and roosts on ridgelines, rocky outcrops, steep canyons, and in tall trees near foraging grounds. California condor populations currently exist in central and southern California, northern Arizona, southern Utah, and northern Baja California.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Rallus longirostris obsoletus; California clapper rail	Endangered; October 13, 1970 (35 FR 16047)	None designated	Currently, the California clapper rail is almost exclusively found in tidal salt and brackish marshes around San Francisco Bay, California. This species requires intricate networks of sloughs to provide sufficient invertebrate prey populations.
Strix occidentalis lucida; Mexican spotted owl	Threatened; March 16, 1993 (58 FR 14248)	Final designated August 31, 2004 (69 FR 53182)	The Mexican spotted owl is found in several southwestern states, including Colorado and Utah, and inhabits mountains and canyons containing dense, multi-storied forests with closed canopies. This species is most frequently found in mixed-conifer forests in canyons.
Vireo bellii pusillus; least Bell's vireo	Endangered; May 2, 1986 (51 FR 16474)	Final designated February 2, 1994 (59 FR 4845)	The migratory least Bell's vireo nests in riparian forests (primarily in willows) at low elevations. They may forage in both riparian and adjoining upland habitats.
Crustaceans			
Branchinecta conservatio; Conservancy fairy shrimp	Endangered; September 19, 1994 (59 FR 48136)	Final designated August 6, 2003 (68 FR 46684)	Conservancy fairy shrimp are only known from California and inhabit large vernal pools with highly turbid water.
Branchinecta lynchi; vernal pool fairy shrimp	Threatened; September 19, 1994 (59 FR 48136)	Final designated August 6, 2003 (68 FR 46684)	The vernal pool fairy shrimp is found in California and Oregon and exists only in vernal pools or vernal pool-like habitats. The vernal pool fairy shrimp has primarily been found in vernal pools in grass or mud bottomed swales, or basalt flow depression pools in unplowed grasslands.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Lepidurus packardi; vernal pool tadpole shrimp	Endangered; September 19, 1994 (59 FR 48136)	Final designated August 6, 2003 (68 FR 46684)	The vernal pool tadpole shrimp is only found in California and is primarily found in vernal pools located in grass bottomed swales of grasslands in old alluvial soils underlain by hardpan, or in mud-bottomed pools containing highly turbid water.
Fish			
Acipenser medirostris; southern DPS of North American green sturgeon	Threatened; April 7, 2006 (71 FR 17757)	Final designated October 9, 2009 (74 FR 52300)	Adult green sturgeon are known to spawn in the upper mainstem of the Sacramento River. Subadult and adult green sturgeon spend the majority of their life in the coastal marine environment, migrating up the Sacramento River to spawn.
Chasmistes cujus; cui-ui	Endangered; March 11, 1967 (32 FR 4001)	None designated	The cui-ui is a lake sucker that is endemic to Nevada and is only found in Pyramid Lake and the lower Truckee River. Cui-ui spend most of their life in Pyramid Lake, migrating up the lower Truckee River from March to June in order to spawn.
Gila cypha; humpback chub	Endangered; March 11, 1967 (32 FR 4001)	Final designated March 21, 1994 (59 FR 13374)	The humpback chub is endemic to the Colorado River Basin and is currently known from several populations in the mainstem Colorado River and various tributaries. The species evolved in seasonally warm and turbid water and are most frequently found in habitats characterized by swift, deep water with rocky substrates.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Gila elegans; bonytail chub	Endangered; April 23, 1980 (45 FR 27710)	Final designated March 21, 1994 (59 FR 13374)	The bonytail chub is endemic to the Colorado River Basin and although once widespread throughout the basin, is now exceedingly rare and is stocked in the upper Colorado River and the Green River. Bonytail chub prefer backwaters with rocky or muddy bottoms and flowing pools.
Hypomesus transpacificus; delta smelt	Threatened; March 5, 1993 (58 FR 12854)	Final designated December 19, 1994 (59 FR 65256)	Delta smelt are endemic to the San Francisco Bay and Sacramento-San Joaquin Delta Estuary. They are a euryhaline species that is uniquely adapted to the Delta habitat. Critical habitat for this species is designated to the I Street Bridge in Sacramento, but individuals have been documented as far north as the confluence of the Sacramento and Feather Rivers.
Oncorhynchus clarkia henshawi; Lahontan cutthroat trout	Threatened. Listed as endangered on October 13, 1970 (35 FR 13519), reclassified as threatened on July 16, 1975 (40 FR 29863)	None designated	Lahontan cutthroat trout dwell in cold-water habitats, including terminal alkaline lakes, alpine lakes, slow meandering rivers, mountain rivers, and small headwater tributary streams, in the Lahontan basin of northern Nevada, eastern California, and southern Oregon. They spawn in streams between February and July.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Oncorhynchus mykiss; California Central Valley DPS steelhead	Threatened; June 17, 1998 (63 FR 32996)	Final designated September 2, 2005 (70 FR 52488)	The Central Valley steelhead DPS includes all naturally spawned populations of steelhead in the Sacramento and San Joaquin Rivers and their tributaries, excluding steelhead from San Francisco and San Pablo Bays and their tributaries. The Coleman NFH and Feather River Hatchery artificially propagated stocks of steelhead are considered to be part of the DPS.
O. tshawytscha; Central Valley spring-run ESU Chinook salmon	Threatened; December 29, 1999 (64 FR 72960)	Final designated September 2, 2005 (70 FR 52488)	The Central Valley spring-run Chinook Salmon generally enter the Sacramento and San Joaquin river systems from March to July as immature fish; spawning occurs between August and early October.
O. tshawytscha; Sacramento River winter-run ESU Chinook salmon	Endangered. Listed as threatened on April 6, 1990 (55 FR 12831) under an emergency determination. Reclassified as endangered on January 4, 1994 (59 FR 440).	Final designated June 16, 1993 (58 FR 33212)	The Sacramento River winter-run Chinook salmon ESU includes all winter-run Chinook salmon spawning naturally in the Sacramento River and its tributaries. The run from the ocean to the Sacramento River occurs in December through July.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Ptychocheilus lucius; Colorado pikeminnow	Endangered; March 11, 1967 (32 FR 4001)	Final designated March 21, 1994 (59 FR 13374)	The Colorado pikeminnow is endemic to the Colorado River basin and, although once widespread, is currently only found in the upper basin of the Colorado River (above Lake Powell). Three wild populations of this species are currently found in the Green River, upper Colorado River, and San Juan River subbasins. Adult fish utilize a variety of riverine habitats and are most abundant in shallow, ice-covered shoreline areas in the winter and inundated lowlands during spring.
Xyrauchen texanus; razorback sucker	Endangered; October 23, 1991 (56 FR 54957)	Final designated March 21, 1994 (59 FR 13374)	The razorback sucker is native to the Colorado River basin; although once widespread, current populations are small and in the Lower Colorado River Basin are restricted to the mainstem Colorado River between Lake Havasu and Davis Dam, Lake Mead and Lake Mohave and in small tributaries of the Gila River subbasin. In the Upper Basin, populations exist in the lower Yampa and Green Rivers, the mainstem Colorado River, and lower San Juan River. Adult fish occupy a variety of habitats, including impounded and riverine areas, eddies, backwaters, etc.
Insects			
Desmocerus californicus dimorphus; valley elderberry longhorn beetle (VELB)	Threatened; August 8, 1990 (45 FR 52803)	Final designated August 8, 1980 (45 FR 52803)	The valley elderberry longhorn beetle is endemic to the Central Valley of California and is only found in riparian forests in association with its host plant elderberry (*Sambucus* sp.). It requires elderberry shrubs with a main stem that is 1 inch or greater in diameter.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Elaphrus viridis; delta green ground beetle	Threatened; August 8, 1980 (45 FR 52807)	Final designated August 8, 1980 (45 FR 52807)	The delta green ground beetle is endemic to California and lives in areas of grassland interspersed with vernal pools including larger vernal pools/lakes. The species is currently only known from south-central Solano County.
Mammals			
Canis lupus; gray wolf	Endangered (Mountain-Prairie Region). Threatened (Great Lakes-Big Rivers Region). Originally listed on March 11, 1967 (32 FR 4001); clarified on March 9, 1978 (43 FR 9607).	Final designated in Minnesota and Michigan on March 9, 1978 (43 FR 9607). None designated in the Mountain Prairie Region.	The gray wolf is listed as endangered in California, Colorado, Nevada, and most of Utah. Although once abundant throughout the United States, the gray wolf has been mostly extirpated throughout its range. Through reintroduction in some areas, and natural dispersal, the gray wolf has repopulated some of its historic range. There is a small known pack in northern California (the Shasta Pack), occasional wolf sightings in northwestern Nevada, occasional wolf shootings and trappings in various locations in Utah, and occasional sightings in Colorado. The gray wolf can exist in a variety of habitats, from deserts to forests. They generally avoid areas inhabited by humans, although individuals may venture close to inhabited areas, particularly if a food source is available. Gray wolves are known to disperse over long distances.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Cynomys parvidens; Utah prairie dog	Threatened; June 4, 1973 (38 FR 14678)	None designated	The Utah prairie dog occurs in semiarid shrub-steppe and grassland habitats and is currently only known to occur in seven counties in southwestern Utah. Utah prairie dogs prefer swale type formations where moist herbage is available even during drought periods, and where the soil is deep and well-drained enough to allow for burrow systems at least 1 meter deep.
Dipodomys nitratoides exilis; Fresno kangaroo rat	Endangered; January 30, 1985 (50 FR 4222)	Final designated January 30, 1985 (50 FR 4222)	The Fresno kangaroo rat is only found in the San Joaquin Valley of California and is most frequently found in alkali-sink scrub and arid alkali grasslands. The Fresno kangaroo rat must have a land surface with hummocks for burrow sites, a substrate of suitable compactness to permit burrow construction, and relatively dense vegetation to serve as cover from predators. This species of kangaroo rat is not known to utilize agricultural areas.
Dipodomys nitratoides nitratoides; Tipton kangaroo rat	Endangered; July 8, 1988 (53 FR 25608)	None designated	The Tipton kangaroo rat is a subspecies of the San Joaquin kangaroo rat, and was historically distributed across a large area of the San Joaquin Valley; the current species distribution covers approximately 63,000 acres. The Tipton kangaroo rat inhabits valley saltbush scrub and valley sink scrub habitats. They require soft, friable souls that escape seasonal flooding; they often excavate burrow systems in slightly elevated hummocks.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Gulo gulo luscus; contiguous United States distinct population segment of the North American wolverine	Proposed threatened; February 4, 2013 (78 FR 7864)	None designated	The North American wolverine occurs in a wide variety of habitats, including high-elevation alpine portions of California and Colorado. Wolverines select areas that are cold and receive enough winter precipitation to reliably maintain deep persistent snow late into the warm season; therefore, in California they are restricted to high elevations. Wolverines have large home ranges and large dispersal distances.
Neotoma fuscipes riparia; riparian woodrat	Endangered; February 23, 2000 (65 FR 8881)	None designated	The riparian woodrat is endemic to the San Joaquin Valley of California and is currently restricted to just a few populations. The species prefer habitat with a large amount of overall structure. They appear to occupy multi-storied riparian areas with a shrubby understory, a midstory of willows or vines, and a well-developed overstory of valley oaks or other large trees.
Reithrodontomys raviventris; salt-marsh harvest mouse	Endangered; October 13, 1970 (35 FR 16047)	None designated	The salt-marsh harvest mouse is generally restricted to saline or brackish marsh habitats around the San Francisco Bay Estuary and has also been found in similar habitats in the Suisun Bay area and the South San Francisco Bay. The species is typically associated with *Sarcocornia pacifica* dominated marshes with high tide/flood refugia of emergent *Grindelia* sp. Mice will also utilize terrestrial grassland habitats adjacent to salt marshes and studies have documented use by salt-marsh harvest mice of marginal, atypical, and suboptimal habitats.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Sylvilagus bachmani riparius; riparian brush rabbit	Endangered; February 23, 2000 (65 FR 8881)	None designated	Historically, riparian brush rabbits were distributed throughout the San Joaquin Valley, extending north to the Delta. Currently, they are restricted to a few isolated populations in the San Joaquin Valley. Riparian brush rabbits require riparian forests with a dense understory shrub layer for cover as well as frequent small clearings to provide basking and foraging habitat. They also require elevated areas within this habitat to provide refugia from flooding.
Vulpes macrotis mutica; San Joaquin kit fox	Endangered; March 11, 1967 (32 FR 4001)	None designated	Historically, the San Joaquin kit fox inhabited alkali scrub/shrub and arid grasslands throughout the level terrain of the San Joaquin Valley. Currently, kit foxes are still found in the San Joaquin Valley, but their spatial distribution has become increasingly fragmented. Although kit foxes may enter the margins of agricultural fields and orchards may provide limited habitat, kit foxes exhibit limited capacity to utilize agricultural land and these lands appear to constitute barriers to kit fox movement. Kit foxes are fairly mobile, primarily nocturnal, and utilize underground dens and therefore do not den in saturated soils or in areas subjected to periodic flooding.
Plants			
Castilleja campestris ssp. *succulenta*; fleshy owl's-clover	Threatened; March 26, 1997 (62 FR 14338)	Final designated August 6, 2003 (68 FR 46684)	Fleshy owl's-clover is a hemiparasitic annual herb that occurs only in California in vernal pool habitats located primarily on alluvial terrace landforms in the Southern Sierra Foothills Vernal Pool Region.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Chloropyron molle ssp. *molle*; soft salty bird's-beak	Endangered; November 20, 1997 (62 FR 61916)	Final designated April 12, 2007 (72 FR 18518)	Soft salty bird's-beak is an annual herb that is endemic to the salt and brackish tidal marshes in the San Francisco Bay area of California. Soft salty bird's-beak is restricted to a narrow tidal band, typically in higher elevational zones within larger tidal marshes that have fully developed tidal channel networks. They typically do not occur in marshes less than 100 meters in width, or in non-tidal areas.
Chloropyron palmatum; palmate-bracted salty bird's-beak	Endangered; July 1, 1986 (51 FR 23765)	None designated	Palmate-bracted salty bird's-beak is a hemiparasitic annual herb that is endemic to the Central Valley of California. This species is generally found in saline-alkaline soils in seasonally flooded lowland plains and basins at elevations less than 500 feet.
Cirsium hydrophilum var. *hydrophilum*; Suisun thistle	Endangered; November 20, 1997 (62 FR 61916)	Final designated April 12, 2007 (72 FR 18518)	Suisun thistle is only known from Suisun Marsh in California where it is generally found in regularly flooded and permanently saturated habitats, such as along the banks of canals or ditches and on tidal floodplains within tidal marshes. This plant is only found near permanent water sources.
Eryngium constancei; Loch Lomond coyote thistle	Endangered; December 23, 1986 (51 FR 45904)	None designated	Loch Lomond coyote thistle is a perennial herb that is known to occur in vernal lakes and pools in Lake and Sonoma Counties in California.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Euphorbia hooveri; Hoover's spurge	Threatened; March 26, 1997 (62 FR 14338)	Final designated August 6, 2003 (68 FR 46684)	Hoover's spurge is an annual herb that only occurs in Northern Hardpan and Northern Claypan vernal pools in California. This species is primarily found in the Sacramento and San Joaquin Valleys, although a few vernal pools that support populations occur on the rim of the Central Valley basin.
Lasthenia burkei; Burke's goldfields	Endangered; December 2, 1991 (56 FR 61173)	None designated	Burke's goldfields is an annual herb in the aster family that grows in vernal pools and swales below 500 meters elevation and is only known from Lake, Sonoma, and Mendocino Counties, California. The species seems to prefer vernal pools on nearly level to slightly sloping loams, clay loams, and clays.
Lasthenia conjugens; Contra Costa goldfields	Endangered; June 18, 1997 (62 FR 33029)	Final designated August 6, 2003 (68 FR 46684)	Contra Costa goldfields is an annual herb that generally grows in vernal pools, swales, and low depressions in open valley and foothill grasslands in west-central California near San Francisco Bay. The species has been found in Northern Basalt Flow, Northern Claypan, and Northern Volcanic Ashflow vernal pool types.
Limnanthes floccosa ssp. *californica*; Butte County meadowfoam	Endangered; June 8, 2002 (57 FR 24192)	Final designated August 6, 2003 (68 FR 46684)	Butte County meadowfoam is an annual herb that is endemic to California and is found in ephemeral drainages (swales), vernal pool depressions in swales, and occasionally around edges of isolated vernal pools.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Navarretia leucocephala ssp. *pauciflora*; few-flowered navarretia	Endangered; June 18, 1997 (62 FR 33029)	None designated	Few-flowered navarretia is an annual herb that is only known from Lake and Napa Counties in California. This species only grows in vernal pools and has only been found in volcanic substrates, specifically in Northern Basalt Flow and Northern Volcanic Ashflow vernal pools.
Navarretia leucocephala ssp. *plieantha*; many-flowered navarretia	Endangered; June 18, 1997 (62 FR 33029)	None designated	Many-flowered navarretia is an annual herb that is only found on substrates of volcanic origin and is dependent on vernal pools, vernal lakes, and swales for survival. This species is currently only known from Lake and Sonoma Counties, California.
Neostapfia colusana; Colusa grass	Threatened; March 26, 1997 (62 FR 14338)	Final designated August 6, 2003 (68 FR 46684)	Colusa grass is an annual grass that occurs only in California on the rim of alkaline basins in the Sacramento and San Joaquin Valleys, as well as on acidic soils of alluvial fans and stream terraces along the eastern margin of the San Joaquin Valley and into the adjacent foothills.
Oenothera deltoides ssp. *howellii*; Antioch Dunes evening-primrose	Endangered; April 26, 1978 (43 FR 17910)	Final designated August 31, 1978 (43 FR 39042)	Antioch Dunes evening-primrose is a short-lived perennial plant that is only known from a few locations in the San Francisco Bay area, California. This species grows in riverine dune habitats and prefers nearly pure sand.
Orcuttia inaequalis; San Joaquin Valley Orcutt grass	Threatened; March 26, 1997 (62 FR 14338)	Final designated August 6, 2003 (68 FR 46684)	San Joaquin Valley Orcutt grass is an annual grass that occurs in Northern Claypan, Northern Hardpan, and Northern Basalt Flow vernal pools within rolling grassland on alluvial fans, high and low stream terraces, and tabletop lava flows.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Orcuttia pilosa; hairy Orcutt grass	Endangered; March 26, 1997 (62 FR 14338)	Final designated October 10, 2002 (67 FR 63067)	Hairy Orcutt grass is an annual grass that occurs in vernal pools along the eastern margin of the San Joaquin and Sacramento Valleys, California.
Orcuttia tenuis; slender Orcutt grass	Threatened; March 26, 1997 (62 FR 14338)	Final designated August 6, 2003 (68 FR 46684)	Slender Orcutt grass is an annual grass that is found primarily on substrates of volcanic origin and is known to occur in Northern Volcanic Ashflow and Northern Volcanic Mudflow vernal pools.
Pseudobahia bahiifolia; Hartweg's golden sunburst	Endangered; February 6, 1997 (62 FR 5542)	None designated	Hartweg's golden sunburst is an annual herb in the aster family that is primarily found in the eastern San Joaquin Valley, California. The species is associated with Mima mound (small hillocks that have formed in dense concentrations) topography and are nearly always found on the north or northeast-facing slopes of the mounds with highest plant densities on the upper slopes where grass cover is minimal.
Sedella leiocarpa; Lake County stonecrop	Endangered; June 18, 1997 (62 FR 33029)	None designated	Lake County stonecrop is an annual plant that is only known from the vicinity of Clear Lake in California. This species primarily occurs in Northern Basalt Flow and Northern Volcanic Ashflow vernal pools, low areas in meadows and gravelly flats, and hollows in exposed rocks.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Sidalcea keckii; Keck's checkermallow	Endangered; February 16, 2000 (65 FR 7757)	Final designated March 18, 2003 (68 FR 12863)	Keck's checkermallow is an annual herb that is endemic to California and grows in serpentine soils in relatively open areas on grassy slopes between 240 to 1,950 feet.
Spiranthes diluvialis; Ute ladies'-tresses	Threatened; January 17, 1992 (57 FR 2048)	None designated	Ute ladies'-tresses is an orchid that is known from several western states, including Colorado, Nevada, and Utah. It can be found in a variety of different habitats, including seasonally flooded river terraces, subirrigated or spring-fed abandoned stream channels and valleys, lakeshores, moist meadows in floodplains, etc. This species can also be found in human-modified wetlands, such as along irrigation canals, levees, berms, and reservoirs.
Tuctoria greenei; Greene's tuctoria	Endangered; March 26, 1997 (62 FR 14338)	Final designated August 6, 2003 (68 FR 46684)	Greene's tuctoria is an annual grass that has been found in Northern Basalt Flow, Northern Claypan, and Northern Hardpan vernal pools in California and Oregon.
Reptiles			
Gambelia sila; blunt-nosed leopard lizard	Endangered; March 11, 1967 (32 FR 4001)	None designated	The blunt-nosed leopard lizard is endemic to the San Joaquin Valley of California and generally inhabits open, sparsely vegetated areas of low relief on the San Joaquin Valley floor and in the surrounding foothills. The plant communities that this species is generally found in are Nonnative Grassland, Valley Sink Scrub, Valley Needlegrass Grassland, Alkali Playa, and Atriplex Grassland.

Scientific Name; Common Name	Federal Listing Status	Critical Habitat Status	Habitat Description
Masticophis lateralis euryxanthus; Alameda whipsnake	Threatened; December 5, 1997 (62 FR 64306)	Final designated October 3, 2000 (65 FR 58933)	The Alameda whipsnake is a semi-arboreal snake that is commonly associated with small to large patches of chaparral or coastal scrub vegetation, interspersed with other native vegetation types and rock lands, and occurs in west-central California near the coast. Although they prefer chaparral and coastal scrub vegetation, the snakes will utilize other adjacent habitat types and can be found a distance from the preferred habitat type.
Thamnophis gigas; giant garter snake	Threatened; October 20, 1993 (58 FR 54053)	None designated.	The giant garter snake requires adequate water during the snake's active season, emergent herbaceous wetland vegetation, openings for basking, upland habitat for cover and refuge from flooding. The snakes primarily inhabit marshes, sloughs, ponds, low gradient streams, and other similar waterways in the Central Valley of California.